



J. H. MCQUILLEN, M.D., D.D.S.

Founder of the Philadelphia Dental College.

ITEMS OF INTEREST.

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Shots from the Profession.

CARE OF CHILDREN'S TEETH.

DR. E. J. CHURCH, LAPORTE, IND.

The care of the teeth of our little ones is largely a labor of love ; it certainly is not one of profit in a pecuniary sense ; if yet, we rise to a higher plane, and estimate the profits from an enlarged and broader view of our duties as practitioners, it is profitable, and pays big dividends. The little child, unable to care for itself, certainly ought to command our best efforts and receive our most tender care.

We ought to impress on parents the necessity of maintaining a constant condition of cleanliness of the teeth.

A lady remarked to me one day when the subject came up, "Why, doctor, they have got to come out anyway, haven't they? What's the use of fussing with them ; let them alone, and when they ache pull them out, that's the best way." Of course, I bowed to the superior intelligence manifested, and changed the subject, as I have found it unprofitable to attempt to sow seeds of knowledge on ground so utterly unprepared for its reception.

A lady of more intelligence than the average said to me on another occasion, when the subject of taking care of children's teeth was being discussed : "Ah, doctor, we are not all dentists, you must recollect ; if we were, perhaps we might be able to do as you suggest."

The fact is, the average man and woman know little about the care of the teeth, especially those of children ; hence there is an indifference manifested that is really appalling. I often wonder, under circumstances, how it is that practitioners are so faithful to their trusts, when so much ignorance is strewn in their way. One would suppose the average practitioner would give up the attempt as hopeless, and would make up his mind that any lasting impression on the great majority of parents was impossible. Yet it is a duty we have to perform. We must keep at it, in season and out of season. A persistent and determined pounding away at the battlements of ignorance and indifference will in time produce good results.

As soon as the incisors appear through the gums, a daily brushing with a soft brush and clean soap is all that is necessary. When the child is old enough to sit at the table and eat the food provided for the rest of the family, then more care must be taken, and a vigorous brushing with a preparation of prepared chalk, orris root and soap, with sufficient sugar and flavoring to be pleasant to the child must be done every morning with a medium stiff brush, and a rule established and enforced, that no one can have breakfast till the teeth have been properly cleaned. The children should be impressed with the importance of attending to the teeth, if they wish to escape pain and many sleepless nights.

The parents, guardians or whoever it is, who has the supervision of children, should be thoroughly impressed with the absolute necessity of having the teeth of the little ones carefully examined by the dentist at least twice a year, and once every three months would be better. If on examination there are any cavities, they should be filled with some quick-setting alloy; I say alloy because children are restive and cannot endure confinement in one position for any length of time, therefore gold or tin-foil is inadmissible.

The work must be done gently, carefully, quickly, and only a little at a time. The preparation of one cavity and the filling of it is all that ought to be expected of a little patient of three or four years of age. An attempt to do too much will often excite an antagonism in the child that no effort on the part of the parent or practitioner can overcome.

There are a class of cavities between the deciduous molars, dish-shaped, so shallow that it is impossible to retain alloy without considerable preparation, such cavities can be filled with some quick-setting cement. Very few children can remain quiet long enough to do more than remove the decayed dentine; hence cement is the best material. It is necessary to inform the parent or guardian that the cement in some mouths wastes away in time, and that it will be necessary to keep a close watch over the fillings, and as soon as they disintegrate below the walls of the cavity, it will be necessary to have them repaired. This can be done very readily without taking much time or worrying the child.

The fewer the rules the easier will they be complied with. Children do not like to be hampered by rules they cannot readily understand.

If they are thoroughly impressed with the knowledge that the care and attention they give their teeth each morning will save them from suffering pain, they will soon form the habit of cleanliness, and their mouths will be sweet and clean. Instruction in childhood is quite a apt to be followed at that given to older people.

TEETH FROM A ZOOLOGICAL STANDPOINT.

PROF. C. C. NUTTING, IN THE IOWA TRANSACTIONS.

Commencing with the most simple teeth we will gradually work up to the more complex, and end with what is regarded as the most highly specialized forms. In this way we may hope to arrive at some appreciation of the path taken by nature from the beginning to the present limit of dental evolution. To the zoologist every part or organ of animals is important, and none can safely be neglected, but the teeth are perhaps more closely scrutinized than any other portion, because they indicate so generally the feeding habits which are the surest guides not only to the life but also the structure of animals. Again, the dentition is the most convenient and accessible character by which the systematist works out his classifications. They are easily examined in the fresh specimens, and are the most durable of all organic structures, often being almost our only criterion by which to place extinct species. These considerations have combined to render Odontography one of the most important branches of zoological science.

The simplest tooth among vertebrates, so far as I know, is that which composes the formidable dental armature of the shark. You will remember there are three well-marked stages in the development of the human tooth—*i. e.*, the papillary, the follicular and the eruptive. We have before us a functional tooth which has never passed beyond the papillary stage of development. They are simply the original papille arising from the mucous membrane. These papille never become inclosed and so cannot reach the follicular or eruptive stages.

The teeth of the shark are not attached to the cartilagenous jaws, but are implanted in rows on the mucous membrane. *These teeth succeed each other by a curious arrangement by which this dentiferous membrane, if I may so call it, is gradually moved forward carrying on its surface the successive rows of teeth.* Thus there is a continuous shedding of teeth on the exterior margin of the jaws, and a continued arrival of new functional teeth to replace those lost. I once heard of a smart boy who announced that pins had “saved a great many people’s lives by not being swallowed.” We might with equal propriety remark that the dentition of sharks had been the salvation of the dental profession by not becoming prevalent among men.

One of the most formidable of marine monsters is the saw fish, armed with its peculiar rostral teeth. The jaws of this animal contain no real teeth, but the rostrum, a cartilaginous process from the frontal, nasal and vomer, contains, a series of long teeth implanted in sockets along the edges. The saw fish is thus provided with a most effective

means of securing prey. Rushing in among a school of shad or mullet it will thrash its saw violently from side to side quickly strewing the surface of the water with dead and dying fish which are afterwards devoured at leisure. The spaces between the sockets are hollow so that a combination of lightness and strength is secured. The saw fish is an ugly customer.

Among the labroids we find illustrations of what are called pharyngeal teeth. The bones of the pharynx being paved with hemispherical grinders, which exhibit the greatest economy of material in the construction of a surface capable of resisting the immense pressure brought to bear in the act of crushing the hard shell of salt-water clams, etc. The common name of these fish being "clam crackers." The grinding action to which these teeth are subjected results in their wearing away and ultimate destruction, necessitating a succession of teeth, so that we have here one of the most primitive cases of true molars having regular successors.

Now it is obvious that any direct pressure on the thin alveolus would be transferred to the delicate forming tooth below. This difficulty is successfully met by transferring the pressure to the thickened and solid columns or plates between the teeth, which plates are lined with an exceedingly hard substance resembling dentine. The alveolus being relieved from this pressure is easily absorbed by the dissolving process accompanying the growth of the new tooth, which is fully formed and ready for work as soon as its predecessor is removed.

Proceeding now to a consideration of a somewhat higher group of animals, we will glance at the peculiarities of the reptilian tooth. We have before us the skull of an alligator, which has a somewhat formidable dentition. But it is in their development that these teeth show the most interesting peculiarities. Unlike those of the shark, they pass through the papillary stage, and then, becoming enclosed in a capsule, exhibit a follicular stage, and are hence of a higher grade. The third or eruptive stage is never truly reached among reptiles. There is an almost interminable succession of teeth occurring irregularly, though the number which are functional at birth is not increased. Contrary to the general impression, the new germ is never first developed in the base of the old tooth, but always originates close to, but outside of the socket of its predecessor. It then moves toward the old tooth, and partly by pressure, but mostly by absorbent action, passes through the old socket and side of the old tooth into the pulp of the latter. The intruder then by its growth displaces the pulp of the latter and finally ousts and replaces it.

Now this continuous but irregular replacement of the old teeth by new ones affects an important end, for by this means the teeth are

rendered irregular in size, the old ones being longer than the new. This secures the best sort of armature for the prehension and laceration of living prey on which alligators largely depend. It is interesting to note that some alligators have part of their teeth implanted in separate sockets and part in a groove.

We now pass to a consideration of the highest, and from a human standpoint, the most important group of animals, the mammalia. Here we shall find a tendency to a reduction of the number of teeth and a specialization of individual teeth to serve more definite functions. The fewer the teeth in any mammal the more marked the specialization, is a rule of general application. The teeth of mammals are always confined to the jaws and never occur in indefinite succession as in reptiles.

The shark furnished an instance in which the dentition never got beyond the papillary stage, and the alligator's teeth stop at the follicular stage. In most mammals we have the third, the eruptive stage, in which the tooth emerges from a completely closed cell.

Commencing with the lowest of the mammals, we have before us a specimen of the ornithorhynchus, or duck-billed platypus. As its name implies, it is furnished with a bill like that of a duck, has webbed feet and, moreover, lays eggs like a bird. It is thoroughly aquatic, living on mollusks, worms, etc. It has no teeth in the adult stage, these organs being represented by horny plates on each side of the jaws. But not the least curious thing about this unique animal is the recently discovered fact that it has teeth during the embryonic period of development. These fetal teeth serve no function, of course, but are suppressed and supplanted by the horny "pseudo-molars," if I may so call them, before the animal is born. This fact gives an important clue to the descent and relationship of the ornithorhynchus. The ancestors of these strange creatures evidently had teeth like other mammals, and the present toothless condition is simply a modification brought about by the gradual adoption of an aquatic life and diet. Any extensive dentition would be unnecessary for the reduction of soft-bodied worms and mollusks. The original teeth gradually became useless through disuse, and dwindled away till now they are found only in embryos, and simply indicate what it once was in the remote past.

In the same way the upper incisors in fetal calves and numerous teeth in fetal whale-bone whales are of no functional use, and are simply trade-marks, indicating the origin of these animals.

I have already mentioned the general relation between many teeth in mammals and the complexity or specialization of individual teeth. This relation might be expressed as follows: The number decreases

directly as the specialization increases. The greater the number the greater the similarity, and the less the number the less the similarity between individual teeth of a given animal. This fact is well illustrated by the porpoise. We find here many teeth, each much like any of the others. Individually, these teeth are quite simple, having a single fang enlarged at its basal end. The simplicity of this dentition is enhanced by the fact that there are no first and second sets, as in most mammals.

It would be hard, perhaps, to find a more widely different dentition than that of the norwhal, another member of the whale family. Here we have the so-called "horn" produced by the immense development of a single incisor, and the most curious part of it is that this is an enlarged and elongated fang rather than crown. The number of teeth is here reduced to two, but these are the most specialized, perhaps, of any in the whole order. Thus we can see that our rule holds good both ways.

We come now to the consideration of a skull which forcibly reminds us of those curious relics of bygone ages which greet us from the pages of the geologies. The skull of the dugong represents a dentition which may be said to be one step in advance of that of the whale—yes, two steps. First in the possession of two sorts of teeth, incisors and molars; and second, that there are two sets of incisors, the deciduous being regularly replaced by a second or permanent set. Some of these sockets in the lower jaw contain abortive incisors, which at once reminds us of the rudimentary teeth of the whale. The dugong in fact can get along admirably without teeth, as it feeds on sea-weed, which is reduced to a pulp by being ground between the hard surfaces of the jaws and the palate. And so we have another example of functionless teeth serving no purpose except as a mark to denote the origin of the species. The upper incisors of the dugong furnish the first instance we have met of "milk teeth" which are temporary and are replaced by a second or permanent set. In looking at this arrangement from a zoological standpoint the question arises—"How did it originate?" The answer arrived at by some of the ablest authorities is as follows:

The reptilian dentition of the alligator may be regarded as the original from which the mammalian type was produced. Now, as we advance from the lower to the higher orders of vertebrates, commencing with the reptiles, we find a general shortening of the jaws. This shortening results in a gradual crowding of the original set of teeth, and a diminishing of the space between them in which new germs could be formed. This at length necessitates an alteration of the original position of the germ of the new teeth, and so these germs have come to occupy a position under, instead of at the side of, their

predecessors. All the so-called incisors, canines and premolars are characterized by a deciduous, followed by a permanent set.

The *molars* have a somewhat different origin. The germ of the first molar has its origin in the matrix of a preceding tooth; but as the growing jaw elongates backward, the new tooth has a chance to develop back of its predecessor, which it does not replace. This process is continued till all the molars are formed. So we have here as many generations of teeth as there are molars living in harmony side by side, instead of each undermining and crowding out its unfortunate progenitor. A patient search would doubtless reveal a moral at this point.

The order *Rodentia* is characterized by the presence of greatly enlarged and modified incisors. These teeth are tubular, and have a persistent pulp. The material of this tooth is so arranged that the hardest portion is the anterior surface and the softest is the posterior. Thus a chisel-like tool is formed, and this is constantly sharpened by the end of the apposing tooth of the other jaw. Should one of these incisors by any chance fail to meet its fellow, it would continue growing indefinitely, and form a long tusk which may curve around till it pierces the skull. In any event, the unfortunate animal is doomed to a lingering death from starvation.

Canines are entirely wanting in all rodents, and we here have a good instance of the rule that any excessive development of the incisors is at the expense of the canines. It would seem that Nature has only a limited amount of material to work with, or capital to invest, and so is forced to "rob Peter to pay Paul."—*Iowa Proceedings*.

Extracting to regulate.—We need not hope to improve deformities at the front of the mouth by the extraction of the first molars, when there is a marked forward inclination of the front teeth, including the bicuspids. The overcrowded front teeth will usually retain their position, owing to the increased bracing caused by the shortened bite. But if such overcrowding is at all relieved, it can only be by a forward movement which increases the forward projection of the arches, and the production of a deformity worse than the one sought to be corrected. While admitting the value of extraction as a means of correction of certain irregularities of the teeth, I am forced to believe that far more irregularities have been caused by extractions than could ever have been corrected by extraction.—*Dr. Davenport, Paris.*

DIET AND HEALTH.

DR. J. T. CODMAN, BOSTON.

We all know what is the normal diet of an infant as it lies on its mother's breast, in the first few months of its life. But what will circumstances force on it as soon, or even sooner than it leaves its mother's milk? It may be its mother gives it a meat-bone to suck; or may be it fills its mouth with blubber oil; or it may be she gives it oatmeal or rice, or potato and garlic; and for its drink she gives it, may be, cows' milk, flavored with coffee, or gives it a sip of beer "to make it a German," or a little tea because "its mother likes it," or the sugar from the bottom of the wine-glass, because the "father likes it."

And as the child grows older, its mother prepares its food for it; and she greases and salts and peppers its potato. She mustards his meat, and fries him doughnut, and gives him some mince pie. She sets his morning cup of coffee before him only a trifle weaker in strength than his father's, and gives him hot batter cakes and fine flour bread, soda raised; and does all she can to make a man of him.

And where will he land? As a man of diet on his father's and mother's platform. Only he will have poorer health, poorer teeth and a poorer stomach; and at the end of a few years will have assisted the good doctor toward paying his carriage, or the good dentist for filling his honeycombed teeth, or the good section for his children's funerals. Tell me, if you can, where, in all this do the inherent instincts of his nature have a fair chance to show themselves? And tell me also if there is not here some chance for a science of diet to interfere!

We need science at the base of diet, and its proofs must rest in physiology, and not on the habits of men that may be forced on them by their various surroundings. In anticipation of this science, I suggest this axiom as one to study—one to prove or disprove:

The normal diet of man will keep his teeth clean without assistance from powder, soap or brushes.

If this is so, we have something to guide us toward the great end we strive for; a knowledge of a basic fact. The animal, led by its instincts and given little power to vary from a strict course of diet, must obey, and is found everywhere in its native haunts with excellent teeth, and largely so in its domesticated state. Its breath is sweet, and it pays no doctor's bills. Why should not man's teeth be good, living on a proper diet?

I will formulate another axiom: *All food eaten should be soluble in the saliva.*

That is, it should be so soluble that, after eating, the tongue and the movable muscles of the mouth, with the saliva, shall be able to

wash and brush the teeth free from all sticky particles of food by their automatic motions.

This seems, on the face of it, to be true; because it is so with all the lower animals without exception. Even your horse, your dog, or your cow, stalled as they may be, hardly present an exception to it.

'I do not now propose to follow out the results of the application of these maxims to daily life; but they will debar from use considerable of the food now consumed, and, as I believe, the portion that is unnecessary and unwholesome.

As surely as you know the dietetic habits of an individual or a race, so surely should you be able to diagnose their condition of progress. Take our savage tribes and analyze them. Raw or half-cooked meat, pounded maize, a wigwam, a few pine-knots for light, and a pipe of tobacco may be enough for them; but it is not enough for me.

We must be satisfied with our condition or not satisfied. If satisfied, it is doubtful if progress will be made. We are not generally contented. The element of dissatisfaction is placed in our minds. That is our warrant of progress. And if we reform our diet, we must move out of our old habits. One by one will they be swept away, and we must move out of the lower habits into the higher.

Can a man be made savage and cruel by his diet? Can he be made stupid by his smoke? Can he be made nervously susceptible by drink? And by this combination of habits be ready to commit all petty meannesses on other individuals? If diet and drink have their effect on individuals, why not on a nation, which is but a congregation of individuals? And if it can be made savage, brutal, cruel, and unjust by its diet, why may it not be made courteous, kind, and just by another diet? If it, or we, can be made unhappy by a diet, why may we not be made happy by a change of diet? If our diet does not develop us, why may not another diet develop all our fine physical, and spiritual instincts? And in correlation to this, why, if our diet and habits produce decay of our teeth, may not another diet better develop and conserve the teeth?

You may say this view is not very encouraging, that it will be centuries before the time men will learn to live aright, and avoid the sweltering habits we all know to be wrong, much less avoid those about which there are chances for varied arguments, and to wait till we again have an equable climate, before we can get into normal conditions, is a hopeless wait; and that the most we can do is to expect that in some remote era of the future, such a thing might be

possible. Nevertheless, I say there is no reason why we should not turn our faces and our arguments toward the right way.

For thousands of years we have been traveling toward the right government; murderous kings and nobles, and torturing priests have stood in the way. We look down the vista of centuries and our eyes can see no end to the cruelties that the privileged classes in the past have perpetrated; but were we at the other end of the vista, we should see it widen and broaden into this great and glorious republic, the culmination of the theories and work of the past students and patriots of unnumbered centuries.

For hundreds of years we have, as the representatives of the Christian idea, been prophesying the reign of an era of peace and good-will on this earth. Has it yet been accomplished? Is it now time to give up this idea as futile? *No!* I think I hear you all at once exclaim: We do not yet despair of that result.

And shall we despair that only in the dim future can reasonable men expect to find the area of perfect forms, harmonious characters and beautiful teeth? *No!* Our duty is to press onward toward the highest mark of our high calling, working both as present benefactors and as aids toward some more glorious era on this earth that we cannot see, but can dream of, hope and desire for our children and our children's children. In doing this, let us turn toward the true diet, study well its conditions and its promises; study well the laws that produce health of the body and the mind. The glaciers or rivers of ice once swept down the torrid Amazon valley—once went sweeping over the whole eastern slope of this continent. Once, also, the deep waves of the ocean rolled in thunder tones over where we now stand.

In some way change will take place as change has taken place. How and when I know not. Out of the fiery volcano and the deep sea has come arable land. No longer is this continent buried like the polar regions in everlasting ice, but verdure and blossoms abound. If the promise of the past has not been broken to the ear or to the heart, why may not the promise of the future be fulfilled also; and the denizens of this earth, slowly but surely, placing hand in hand and joining the great brotherhood of science, push their way up into the regions of peace, purity, justice, health and happiness?—*International.*

Development of the Teeth.—By Drs. Carl Heitzman and C. F. W. Bödecker is a reprint of articles from the *Independent Practitioner*. The reputation of both these gentlemen is so high for learning, and patient and intelligent investigation, that this pamphlet does not need our commendation. It should be studied thoroughly by every dentist.

ALL THAT DISCOLORS IS NOT BRASS.

Perhaps this is the reason that some gold fillings turn black.—D. W. B.

A well-known manufacturer says: "Every jeweler has doubtless met with many curious incidents in his business career, but I think a recent experience of mine is worth relating. Shortly after the holidays there came into my place a pleasant-mannered young man, who expressed a desire to look at some gold necklaces. It is needless to say I sold him one. It was fourteen carats and very pretty. Two days later the door was flung open and in rushed the same young man, boiling with rage. He threw the necklace on the counter, demanded the return of his money, and threatened to expose me as a swindler. It took half an hour to learn his story.

"It seems that after presenting the necklace to his lady love, he had taken her to a reception, ornamented with his present. After the first dance there was a commotion in one corner of the room, and the rivals of our customer's best girl were tittering among themselves and whispering about her.

"The young lady looked in the glass and almost fainted at the sight. Her beautiful neck was almost black from the friction of the necklace. She changed her mind about fainting, returned home with her brother, and sent the necklace back to her young man with a note that she did not like his brass.

"I tested the necklace in his presence and proved to him that it was full fourteen carats. Just at that time a young physician called to purchase a scarf-pin. He had overheard part of the story, and asked to hear the rest, as he believed he could throw some light on the subject. Pretty soon he laughed outright, and said, 'Why, sir, the trouble is with your girl, and not the necklace. She has too much sulphur, iron, mercury, salt, or acid in her blood, and, as any of these substances has an affinity for gold, the explanation is clear. I have patients for whom mercurial medicines have been prescribed, and the result is their fingers on which rings are worn discolored at once.' My customer cooled off and carried his purchase away.

"In connection with this subject a good story is told at the expense of a Maiden Lane dealer. He gave his sister an eighteen carat ring as a present. He is a practical joker, and she asked him if the ring was gold. He replied that it was. That evening the young lady had occasion to remove the ring from her finger, and she noticed that the skin was greatly discolored. 'Jim has carried his jokes too far,' she exclaimed, and opening the window, threw the trinket into the street; some gamin picked it up. When my friend learned of the incident, he came to me for consolation, and I explained my own experience. His sister is sorry for her haste.

“‘All is not gold that glitters,’ nor is everything brass that discolors. A person wearing a fourteen carat ring on one finger and a ten carat ring on another may have noticed that the finger with the higher carat will be discolored and the other one not. The reason is that the ring of the lower carat fits snugly and the other is rather loose, thus causing a friction.”—*Jeweler’s Weekly*.

EFFECT OF FOOD ON PHYSEOGNOMY.

DR. J. T. CODMAN, BOSTON.

Taking our human anatomy ; taking a man as a fruit eater ; as a nut and a grain eater; as a lover of the beautiful things that smell sweet and are luscious—a lover of strawberries and grapes; of those fruits that delight the eye—the peach, the pomegranate and the orange ; that are sweet to the taste, as the date, the fig and the bananna, as well as many tropical fruits unknown to us here. Take him as a lover of beautiful flowers that nourish the blood as well as the mental organism. Take him even as a lover of eggs and the birds that lay them, as a partial flesh eater, if you please, and decide, as you have a right to, that this combination of bread and meats and fruits with a genial climate will give healthy blood, bones and muscles.

Put this organism, this spiritual being—by that I mean a being with high instincts and tastes, soaring upward, restless, desiring cultivation, and not satisfied with a merely animal life—on an ice plateau, with ten months of winter and four to fourteen feet of snow and ice, with a diet of raw fish and clams and nothing else, and what would become of him? What sort of a grand man would he make? Why, like the present Esquimaux, a man without influence, power or nationality.

Let us look at the reverse. As we approach the bread eaters, notably the Teutonic and Slavonic races, how rapidly power and intelligence increase, how ingenuity thrives, how muscular the men grow, how active their brains grow, how the nation and the arts of civilization thrive.

With a salubrious climate and a bountiful, fruitful vegetation, what would be the gravitation of the race? Would it be toward the destruction of beasts and the feasting on their carcasses, or toward the cultivation of the beautiful fruitage that begins in leaves and flowers and ends in tempting clusters of grape and grain? Toward the latter, I think.

And the reason why I think so is from my observation of the present tendencies of our people. Picture to yourself the average diet of New England people two or three generations ago. It was of bread made of Indian corn, rye and occasionally barley and wheat, dry beans

and peas, cabbages, squashes, pumpkins, parsnips, turnips, carrots and onions, apples and hard pears. For meats, beef, pork, poultry, mutton, wild game and fish. These were the principal foods of a family for nine months of a year. For sweetening they had molasses and a very little sugar; and for drink, apple cider, rye coffee, rum and water, milk, some genuine coffee and very little tea.

When "killing time" came, the family hog was slaughtered. A large portion of it was put in salt brine; some parts smoked and some made into sausages. It was the same with the cow or ox that was killed. A part was sold to friends and neighbors and the remainder corned, and a good stock of salt codfish was laid in for winter's use.

All this is well known, but great changes have taken place since then. Wheat, finely ground, has largely taken the place of Indian corn. Oat meal is largely used where once it was not. Rice, sago, tapioca, and various preparations, as farina and grannum, are consumed. Potatoes are enormously used, where seventy-five years ago they were hardly known. Tomatoes, now in general use, were then unknown. Numberless varieties of all the vegetables of those days have been continued, such as the horticultural seavey and Lima beans, toothsome peas, new varieties of sweet corn, turnips, onions, squashes, cauliflowers, and celery. Varieties of apples have reached the hundreds, and pears also. The tiny strawberry has grown to be a mouthful each. The Lawton blackberry, found in Dorchester, a part of Boston, is a wonder in size and flavor, and is not beyond the ability of the average family in cost. The cultivation and production of fruit and vegetables in our orchards and gardens is enormous, and as our seasons are not long enough to supply the demand, we start our crops largely under glass; and we make our fruit season longer to the customer by "cold houses," where we keep it into the winter. Ready transportation brings us strawberries from Florida and from Nova Scotia in the same spring and summer months.

From the South early spring brings us all kinds of young vegetables, and summer follows with early fruits, and then melons and peaches, and still the demand increases year by year. From foreign lands and parts of our own land come grapes, figs, oranges, bananas, dates, prunes, olives, lemons, and nuts, increasing in quality and quantity every season.

These give our people a different and, I believe, a better diet than formerly. Add also to this the immense quantity of canned fruit and vegetables that are used, and we can see readily that the dietetic change that has taken place, and is taking place in our people, is very great and remarkable.—*International.*

DENTISTRY AS RELATED TO MEDICINE.

DR. GEORGE W. WILLIAMS, RICHMOND, IND.

Medicine is the art and science of preventing, curing or alleviating disease. In the beginning it was an empirical occupation, and it remains so yet to a considerable extent. But as it grew and developed the study and application became more necessary for the practitioner, and the fact was recognized that each one could cultivate only a part of the field. Thus it is that medicine takes its highest form in specialism to-day. Specialists in medicine are those who make a special study of the diseases of parts of the body and confine their practice to these diseases. Such practice is called a "specialty" in medicine, and this brings us to ask, is dentistry a specialty?

Dentistry is the art and science of prevention, curing and alleviating the diseases of the teeth, and, as an ever present necessity, is now practiced all over the civilized world.

Within the last few years a great deal has been written and said as to whether dentistry is a specialty of medicine; and, as such, should dentists receive recognition by medical men and medical associations? The agitation of this subject and the discussions in the past were prompted, no doubt, not so much by a desire to improve our practice and knowledge as by a desire to acquire a greater distinction and position professionally. The highest expressions in medicine come from its delegated bodies of medical men, taught by medical schools and accepted by mankind. *They* are all required to have the degree of "Doctor of Medicine." This, then, is the standard to which dental colleges must attain in their course of instruction to entitle their graduates to be recognized by their sister profession. But if we are to judge from the spirit and expressions of some of the best and most renowned men in the dental profession, any former recognition from medical societies is not now desired by the dental profession, a feeling being prevalent that in maintaining an independent organization, we can be more effective than if we were merged into medical organizations and thereby lose the prestige we possess; that we have become numerous and respectable, and have men of advanced thought and science, professionally, in our ranks and the confidence of the world in our special calling, is enough; that the organization of dentists is too firmly fixt to be broken up and disbanded by merging into other organizations; and that in the natural order and fitness of things, dentistry, as practiced to-day, is not a branch of medicine.

Fifty years ago there were few facilities for dental education, but in the interval it has established its own aids without help from medicine; it founded schools, and educated and sent out laborers. The education and the work was practical, and now the field being supplied,

more care to the education of the coming dentist can be given, making its precepts broader and more comprehensive. Dentistry has made itself, and we have become dentists and specialists by our efforts, and in a practical way. I doubt if the standard of dentistry would be much higher, or the practice much better than it is, if every dentist was a graduate of medicine. I believe medical men are kindly disposed toward us, though in the beginning they may have held us somewhat in derision, which was natural; as we have shown our worth and ability, they have given us credit till; we are now recognized for all we are worth.

Gentlemen, as a profession, dentistry has made greater progress in the last twenty-five years than medicine. It seems safe then to intrust the future of this science and art to our hands. Education, either by precept or bitter experience, will drive out the incompetent and inefficient, which will result in the greater elevation of dentistry; and when this work shall have been accomplished, dentists, as a whole, will be men of general and professional education.—*Ohio Journal.*

PYORRHEA ALVEOLARIS.

DR. WM. H. ATKINSON.

I almost invariably use constitutional treatment in pyorrhea alveolaris. It is only those people that are very well endowed with good blood crasis that do not need constitutional treatment. Nutrition is the only means of cure; for we know that everything that feeds must have something to feed on, and if it feeds on something to live, that which is called life must be transferred from the food to the feeder.

Atrophic dyspepsia of the connective tissue is the first step in this disease: not of the cement, which we say constitutes the modification of the bone that makes the connection around the teeth—I mean the ectosare, or outside skin of the ameboid body which we call the connective-tissue corpuscles, and which makes the lining of the socket and the tendons of the body. It has that peculiar waxy surface that enables those elements to be fused, and that constitutes the tendons and the membranes. It is precisely the same as when you get a hang-nail; the first point that you tear away breaks the connection and leaves a hanging part. The reason why we don't understand these expressions of disease is because we have been looking at a mass of tissues in organs and not at the molecules which constitute them.

There is not a man in medical practice that is worth a snap to give advice in these cases. I saw that in one fresh from school at the Minneapolis meeting. Western men, tho they follow the old textbooks, are willing to learn and to ask assistance from whatever source

they can get it. They take us to be worth something, and they invite us to examine their cases, but we found them still pursuing the treatment laid down in the books, and following what was given up, years ago, as effete. They were poulticing periostitis of the jaws and alveolar abscesses.

I want to fasten on your minds the growing necessity for the dentists of this city to establish a free hospital into which everyone who is suffering shall be able to go and receive intelligent treatment, where we shall demonstrate the very best ability of the profession, and join in having such clinics as we have never yet had; where we shall have such diagnosis, treatment, and cure as have never yet found pronouncement on this planet. When we shall have such an institution as I hope will be established in this city, so that we can have those things brought before the minds of all and get the best light on them, where we can pool our issues and let every man have the benefit of the best ability and work, then we will make a splendid advance. I wish I had time to make the demonstrations as clear to your minds as they are to my own. It is the nutrition of the five tissues that constitutes the human body that we must understand, and know how the food we eat is converted into pabulum, how that pabulum is converted into blood, how the blood is transformed into protoplasm, and protoplasm into embryonal corpuscles, and embryonal corpuscles into the various tissues that constitute the organs of the beautiful machine that we call the human body, and which stands, according to the old Greek word *anthropos*, with upward-turned face.

The treatment for all patients that you will see, with the exception of about one per cent, will be to give a two-grain pill of the sulphate of cinchonidia night and morning. I have some patients who have pursued that treatment for four years. If they are at all nervous, then take McKesson & Robbins's *nux vomica*, *phosphorus* and *cantharides*, one pill each day, in addition to the four grains of cinchonidia. Some patients require a little more, some a little less, but it is not often they require less. Why do we give cinchonidia? I have a suspicion that what we agree to call *cruorin*, which has a red color and means a red corpuscle of the blood that is carried through the system for its use, is so nearly like the sulphate of cinchonidia that there is no chemist who has been able to show the difference. Hence I take it that this cinchonidia is readily convertible into the *cruorin* which constitutes the red corpuscles of the blood.

The treatment I have indicated is the general treatment. I can show cases of school-teachers who were all "played out" when they came to me, and who are now in full health and happy. I have named the simple prescription that I have given for a long time.

There are other prescriptions, such as elixir of vitriol,—half a tea-spoonful in a wine-glass of water, to be given at meals to people who are played out. There is another remedy to which a gentleman in this room, I think, owes his life, and that is aqua regia,—five drops in a glass of sweetened water, or ten drops to be taken after each meal for one or two weeks; then to be repeated after an interval as may be required. Then you get a gastric juice that does its work.

My impression is that in pyorrhea alveolaris the alveolus surrounding the root of a tooth does not first commence to "waste away;" so that the gum, in consequence, loses its attachment to the neck of the tooth, leaving an open pocket. Possibly that may be the correct idea; but I think the gum first becomes inflamed to such an extent that its nutrition is interfered with; want of proper nourishment caused it to detach itself from the neck of the tooth, and thus a pocket was formed. This is what occurs in salivation. The gums become diseased because nutrition is interfered with, and their attachment to the necks of the teeth is destroyed. I have heard the statement that no case of pyorrhea alveolaris ever occurred except where the patient had been salivated. Whether this is so I am not ready to state, but I believe every person who has been salivated suffers variably from this disease. I am of the opinion that under the irritation caused by deposits at the margin of the gum the pericementum throws out lime-salts which, mixing with epithelial scales and particles of food, are deposited on the roots of the teeth, forming what we call tartar. In my treatment of all cases of this kind I have depended almost entirely on a careful use of my instruments and the perfect removal of the deposits from the teeth, making them as smooth as I could, and simply washing out the pockets with a weak solution of carbolic acid. I believe that by this treatment I can accomplish all that can be accomplished in any way with a disease of this kind.—*Cosmos*.

Cocaine in Devitalizing Pulps.—DEAR ITEMS: I see frequent remarks on the subject of the devitalization of dental pulps, but I see no item that mentions the use of cocaine for that purpose. I seldom use nerve paste, and then only in cases of congestion.

I put on the rubber dam and then use pure crystals of mur. cocaine with just water enough to moisten the cocaine, and after ten minutes, I remove the live nerve with less time than with nerve paste.

I seldom find it necessary to destroy the nerve, except in crown work, or when the nerve is badly diseased.—*G. H. Collins, Lincoln, Neb.*

PERIOSTITIS.

DR. J. TAFT IN OHIO DENTAL SOCIETY.

In treating periostitis it is important to note all irritants, and the influence that each may have on the diseased tissue. There is, perhaps, none requiring more special attention than salivary calculus. This, in many instances, occasions so much irritation that restoration cannot be obtained while it is present.

Occasionally, with a live pulp there will be inflammation of the periosteum, but it is not often—at least I have not found it so—and it is not always when the disease occurs that it is found at the end of the root. In almost every instance when there is inflammation at the end of the root, the pulp is dead. I do not now remember to have seen a single instance in which that affliction was found at the end of the root, that the pulp was not dead. But this affection may start from a diseased gum by violence upon a tooth, and then it involves all of the membrane, covering the root. It may extend to the end of the root, but then it will be no more severe there than elsewhere, except possibly in a certain kind of violence. A blow on the end of a tooth may, of course, bruise the membrane at the end of the root more than elsewhere, and inflammation arise; and such inflammation may be more marked there than elsewhere.

Many operators tell us that they have frequently failed at the cervical border, and I presume all operators have as many failures at this point as anywhere else. The question has frequently been asked, why is this? Some give one reason, others another. Some things, however, that will be plain to every one. The cervical border in a proximate filling is so situated that foreign substances are liable to lodge and be retained till decomposition takes place. It is difficult to keep the proximal surface of a tooth free from offensive accumulations. It is frequently difficult to have the cervical border well protected, and especially if the cavity extends well toward the root of the tooth. And then the formation of a cervical wall is attended with difficulty. In many instances it is necessary to work by reflected light in operating on it. The cervical border of a proximate cavity is difficult of access in the different steps of the operation of filling; this accounts for some defective work and failures.

A thorough examination of proximate fillings, as they are usually presented, will reveal quite a variety of defects. In some the form of the cervical wall or border is defective; the decay may not be all removed, the edge left irregular and rough, or sharp at the edge, so that in the introduction of the filling it has been fractured. Sometimes there is a failure in the adaptation and consolidation of the filling, and

so the cavity is not protected. Perhaps the cavity has not been sufficiently filled to protect the tooth; and often the cavity is over-filled, and the material permitted to over-lap on the tooth outside of the cavity, thus affording a ready lodgment for destructive agents, by which decay is soon set up. The indications are to avoid these defects by careful and skilful manipulation in the operation of filling.

The filling and tooth should be so dressed that a free and smooth space is made between the necks of the teeth, that they may be easily kept clean. Sometimes the enamel and cement fails to cover the dentine at the neck of the tooth; these points are very subject to decay; filling a cavity of decay in the vicinity of such an exposed point, though perfectly done, will in nowise prevent the attack of decay, this may be in contact with the filling, or it may be at a distance from it. A diseased gum-margin is often the occasion of decay, especially on the proximate surfaces of the teeth, but the cervical portion of the lingual and buccal teeth are affected in the same way. Now if these points receive the attention they demand, there will be less occasion for complaint about failures in proximate fillings.—*Ohio Journal.*

TREATMENT OF PULPLESS TEETH.

DR. W. E. TUCKER, BUTLER, MO.

The importance of saving the natural teeth is a subject full of interest to every progressive dentist.

Those of us who have been in the profession a score of years well remember the time when the saving of aching and badly decayed teeth was considered of little importance, or, at least, the task was considered so difficult and uncertain that it was only the most favorable cases that were undertaken. Many valuable teeth and solid roots were sacrificed, and our patients forced to wear artificial substitutes the rest of their lives.

But oh, what a change has come over us! Now it is hardly excusable to extract a tooth or solid root which, if retained, would be useful and probably prevent the wearing of a plate. Circumstances, of course, must control our decision in each case. But I do say it is wrong to extract aching and pulpless teeth indiscriminately, and subject our patients to the inconvenience of wearing a plate, or leaving the features distorted or the masticatory functions impaired. There are many who for years have dreaded the thought of losing their teeth, but come to the conclusion that they must at last part with them; but when, on consulting their dentist, are told that, owing to the advanced stage of dental science, the misfortune of losing their teeth can still be averted, and they are delighted beyond measure, and seem to take a new lease upon earthly happiness.

By way of illustration, I will relate a case that came to me a few weeks before leaving home: A gentleman of some prominence in our State came to consult me about his teeth. He had lost one central, and the other incisors were in a bad condition. He was wearing an artificial tooth, and had had the others filled several times, but they would not "stick." He told me how he hated to wear a plate; how he had, while traveling over the State, left it a number of times under his pillow at the hotel, and how he would not think of it till just about train-time; and many other little inconveniences and embarrassments had that innocent-looking tooth subjected him to. Now we all know the advice that a great many dentists would have given in such a case, and just what we ourselves would have given a few years ago. It would have been something like this: It will take a great deal of work to save those teeth—in fact, there is some doubt about saving them at all, and as you already have to wear a plate, I advise their extraction, and that four nice teeth be inserted on a rubber plate—and besides it is so much cheaper; and the poor fellow would have submitted, saying that he knew that was the only thing that could be done. My advice was quite different from the above. I said the thing to do was to treat those teeth, place crowns on their roots, and fill the vacancy with an artificial tooth that would be stationary and without plate. He expressed great surprise, and even incredulity; but after inquiring the price, and tho it seemed a little high, he said, "If you can do *that*, just go ahead."

I put gold crowns with porcelain fronts on the roots and attached to two of them a tooth to fill the vacancy, *à la* bridge-work. When completed, the gentleman showed his appreciation by saying he did not think I had charged him enough, and that he would pay me more if I would accept it. The above is only a representative case of a large class, and serves to illustrate the importance of saving the natural teeth, and the high appreciation our patients have of such work.

With the above preliminary remarks, I will try and give a concise, but practical, method of treating teeth, one that has made that class of work much more agreeable to me than formerly; for I am free to confess it was once attended with many difficulties and forebodings. And if any one can gather some points from my paper that will help to make this work easier and more successful, I shall feel amply repaid for the effort I have made.—*Western Journal.*

The length of pipe laid in Paris for the distribution of power by compressed air already exceeds 30 miles. The pressure is 80 lbs. per square inch.

TREATMENT OF ADJACENT PARTS IN FILLING TEETH.

W. H. MORGAN, M. D., D. D. S.,

Dean, Department of Dentistry, Vanderbilt University.

Notwithstanding the enthusiasm our predecessors manifested over filling teeth, we know it is often of doubtful utility, owing to surrounding conditions. This is, perhaps, as often due to the environments as to the condition of the tooth itself. What is the cause of failures? I answer, largely the condition of the soft parts of the mouth. The tooth should not be filled till the mouth is in as healthy a condition as possible. If the gums are simply soft, as we often find in very young persons, without any manifestation of serious disease, they should be restored to a healthy condition before filling. When the gums are soft and flabby the mucous follicles are greatly enlarged, and a much larger amount of their viscid secretion is poured out, and it hangs round and between the teeth. It is often, if not always, acid, and may act on the teeth chemically. Small particles of finely comminuted food become entangled in it and are held about the teeth, when fermentation is set up and some acid is produced that may act on tooth structure. Therefore, the gums should be put in general good condition before the important and delicate operation of filling is performed. Sometimes there is an amount of calculi on the necks of the teeth sufficient to produce the general condition referred to; even worse, a discharge of pus or ichor, or both, about the necks of the teeth, this ichor having in it some chemical quality that breaks down tooth structure. Of course, such condition should be relieved before the operation of filling is attempted. You may have this unhealthy discharge from about the root of a tooth that has lost its crown and pulp. Sometimes one will have this unhealthy discharge from the gum between the teeth that have had a large V shaped separation made, after which they approximated, folding up the gum, making it so unhealthy as to produce the disintegrating discharge. Many of you, no doubt, in examining fillings on proximate surfaces have found various signs of decay beneath the margin of the gums, justly attributable to this cause. Now in view of the fact that this operation often fails, in view of its transcendent importance in saving teeth, it is due our patients to give them the benefit of every chance to save their teeth permanently. Therefore, it is our duty not only to make the operation as perfect as possible, but to consider all the modifying circumstances that surround the case. We should make it a condition on which we render services, that we treat all diseased gums and surroundings so as to enhance the value of our fillings. If the patient refuse to submit, refuse to operate; you will not lose by such a course either in reputation or in pocket.

I assert that such is the liability of failure in saving teeth that everything which will tend to promote its permanence and success should receive proper attention. There is an implied obligation (as binding as if written and signed) to every patient to give them the benefit of all the skill we possess, and that this obligation reaches beyond the operation especially in hand.—*Dental Headlight.*

Our Blunders.—As I look back down the vista of years that are gone, and call to mind the time when I, too, was a young dentist, I remember with what complacency I contemplated my early operations. I had not sufficient experience at that time, and was too little of an operator to be able to see the faults that existed. Like most young graduates, I was entirely convinced of my own great abilities, and felt that it was my mission to lift operative dentistry to a higher plane. I affected to despise the mechanical branch of my business, though I worked diligently enough at it when I had any of it to do, for it was on that I was chiefly dependent for my bread and butter. I inserted fillings and spent hours in polishing them up, in burnishing the surface and admiring the shining gold. You can imagine my consternation and horror when some of those very fillings came to me shortly after, brought in the hand of the patient, and when about others I saw the fatal blue line that indicated failure. Well, I have spent many a sleepless hour fairly blushing in the solitude of my chamber, in mortification and humble pride at the miserable defects of that which I had regarded with so much complacency. It was a bitter thing to be convinced that I was not half so fine an operator as I had imagined myself, and instead of pursuing my triumphant course, to be obliged to painfully retrace my steps and laboriously to search for the causes of my failures. I found some of them, and, having rectified these, again began to plume myself on my attainments, only again to be humbled by new failures, and once more to creep painfully back to the beginning in search of the source of my humiliation. And this has been about the history of my professional life, and there is little doubt that it will be yours. You may make less mistakes than I have made, but when you arrive at middle life there will be, if you are the honest man that I think you are, little comfort in looking back over much of your professional life. Your chief satisfaction will be that, despite your stumblings, you have yet made steady progress.—*Dr. W. C. Barrett, in Independent Practitioner.*

By the use of a small pedget of cotton moistened well with glycerine, to press No. 18 tin foil closely to the cast while yet moist with liquid silex, the tin is easily removed from the rubber after vulcanizing.—H. G. K.

MY METHOD OF GOLD FILLING.

DR. WM. H. STEELE, FOREST CITY, IOWA.

I have done away with the system of making retaining points, as I believe them dangerous. An operator who is in the habit of depending on them for retaining the foundation of his filling is often apt to overlook or neglect more important considerations in the forming of the cavity. There is always danger of drilling too near the pulp, thus forming perfect conductors of heat and cold from the body of the filling to the pulp, which sometimes terminates in the loss of the tooth. Again, in forcing gold into the retaining points with a mallet, it acts as a wedge, causing the tooth to check or crack. This may be so slight as to be overlooked at the time the work is done, but often ultimately causes the failure of the filling.

I advocate the use of Williams' Crystallloid, or Sibley's Felt Gold, for all foundations. I do not want to be thought overzealous in recommending these preparations of gold, tho I have great faith in them as a material for cervical margins and as a foundation for all gold fillings. The tendency of these forms of gold to spread laterally under direct pressure enables the operator to easily and quickly start a gold filling without the use of retaining points, and when started we have a foundation to work on that will not move or draw away from the edges of the cavity, but the longer you work on this foundation the firmer it becomes anchored.

I give my method as follows: After separating so that all parts of the cavity can be reached, adjust the rubber dam, crowd it well up out of the way and fasten securely, remove all decay and use great care in preparing and shaping the cavity, having it as near a dovetail shape as possible, the bottom as level as can be made, the edges slightly so, that the gold may finish up smoothly at all the edges; dry the cavity thoroughly. Now cut your gold with a sharp knife into pellets about the size of the cavity; place a piece in the cavity large enough to cover the bottom with a large-faced shallow serrated plunger and hand-pressure; force the gold directly down into the cavity, going over it several times with a rocking motion of the hand, till the whole mass is thoroughly united and condensed, after which insert another piece, and proceed as before, till the cavity is from one fifth to one half filled. The amount of gold can be varied to suit the different cases, using more for proximal cavities in frail teeth. Complete the filling with semi-cohesive foil, mallet and with fine points finish the filling well, and give it a nice polish.

I noticed a set of plastic gold pluggers illustrated in a recent issue of the ITEMS, that will be just the thing for condensing the Crystallloid and Felt Gold. The fact is, the advertising department of your journal should be familiar to every dentist.

PYORRHEA ALVEOLARIS.

DR. FRANK ABBOTT, NEW YORK, IN FIRST DIS. SO., N. Y.

There are so many ways of treating the different phases of this disease it would be necessary to present those of special subjects to come to any definite conclusion as to what we can and should do in any particular case. As for the surgical treatment, properly speaking, as practiced by Dr. Riggs, I believe it is too severe. I do not think there is any more necessity for cutting into the soft tissues, or attempting to cut away any portion of the alveolus, than there is for cutting into the gum outside or the tissues in any other location in the mouth. I have never seen an instance in which the alveolus could be reached with an instrument without first cutting through the soft tissue. That Dr. Riggs did cure some cases of this disease by local treatment is probably true, for there are some where local treatment is all-sufficient, if we thoroughly cleanse the teeth from the deposits about them, we shall frequently get a return to health without medication. But this will not always hold good. In those I have had under treatment I have found no necessity for using sulphuric acid, aqua regia, or caustic potash, for tho I have not in every instance cured, I have relieved every case that I have had to do with without such severe treatment. That a cure can be effected with the above remedies, leaving no necessity for further treatment at any subsequent time, is, in my opinion, claiming too much. *Pyorrhea alveolaris is never cured,—i. e., the normal conditions of the parts are never restored.* That it can be relieved for the time being, and may appear to be cured, I know is true; but the same condition that first developed the disease still remains in the patient's system, notwithstanding the treatment, particularly if it be altogether local. Now, the same primary conditions existing, the same results will recur unless the case is followed up and the treatment repeated every few months, certainly as often as once or twice a year.

I have heard it stated that cases of pyorrhea alveolaris occur without any deposit on the teeth,—and also that this disease is entirely and emphatically caused by some constitutional taint which produced the disturbance in the gum and interfered with its nutrition, causing the gum to detach itself from the necks of the teeth and leave an open pocket, without having, however, any deposit around the roots of the teeth, either calcarious, serumal, or sanguinary. *There is some deposit on the teeth in every instance that I have ever seen.*

I heard last summer quite a labored paper, taking forty-five minutes in the reading, and very vigorously read, too, in which it was attempted to establish that there were two membranes surrounding the root of a tooth. This, I believe, from actual observation under the most powerful microscopes, has never been proved.—*Cosmos.*

EXTRACTING FRAIL ROOTS.

An article with the above title appeared in February ITEMS from Dr. W. E. Driscoll, in which he described his method of removing "roots so thoroughly decayed into a thin tube that any attempt to extract them with forceps, or elevators results in a chipping off till a large amount of alveolar process is sacrificed, or the attempt at removal is abandoned."

I tried the Dr.'s method several years ago, but have since adopted another; that I have not seen described, and which with one has been quite satisfactory.

My method is as follows: In a case of this description, take a square-end fissure bur No. 59 or 60, and grind on the lathe a Λ or spade-point. This makes an instrument that will cut both at the *point* and *sides*. With this bur revolving in the dental engine cut through to the end of the root, then laterally till you have divided it in half, then an elevator (an old enamel chisel of the proper shape makes a good one) passed between the halves and rotated will detach both pieces, and with a "hoe" shaped excavator or small forceps they are readily removed.

I also find this instrument useful in separating the roots of molars, both upper and lower preparatory to extracting. The advantage of this method is that you do not have to lance the gum or crush through the alveolar process.

J. O. HODGKIN, D.D.S.

Warrenton, Va.

Filing Teeth.—Some years ago, for a short time after the publication of Dr. Arthur's book, I indulged in that practice, but the ultimate results were very unsatisfactory. I say *indulged*, because at the time I found it a great convenience in operating; it made the work easier, and it was only abandoned later from the positive conviction of its pernicious effects. Subsequent decay was not prevented, mastication was meantime hampered, temporary separations were followed by worse conact, and all later operations for proximal decay were rendered more difficult, until cutting or filing was again resorted to.

I have since repeatedly examined the mouths of persons whose teeth have been cut or filed apart by some of the best exponents of that practice, desiring to revise my judgment on the subject, and the conviction which caused me to desist has always and constantly been confirmed by the appearance of the same evils, with no compensating advantages.

Keeping before my mind the "preservation of the teeth in the greatest efficiency and for the longest time," I have never seen anything in the way of cutting or filing separations that I could regard as successful.—*Dr. J. Morgan Howe.*

CAPPING NERVES.

Editor of the ITEMS:

Few patients of a transient practice will permit treatment of aching teeth; they do not want to spend so much time and money, and prefer extraction. But should they desire capping of pulps, I would certainly try less barbaric means than some to find out the condition of the pulp.

To take a sharp-pointed instrument and stick into a pulp to see if it is alive is "rough" on the patient, and to be convinced only through the flow of "bright, red blood" is ridiculous. What patient could stand such a treatment? I remember excavating a cavity for an Irishman once, and through a sudden motion of the patient I lightly touched the pulp. I can feel the Irishman's fingers on my cheek yet.

But this is not enough; after calming the poor patient down some dentists "gently wipe the cavity with a small bit of punk dipt in creosote.

Why not kill the pulp at once? This killing by degrees dates back to the Spanish inquisition, and is not permitted any more.

Professor Flagg says: "Never use creosote, for it *may endanger* the pulp." Regarding capping of pulps, he says: "Not even to touch the pulp with a light stream of tepid water. Be careful not to irritate the pulp. Use soothing medicaments, as oil of cloves, hec-tate of morphia. Then work carefully, and be cautious not to press the pulp in capping." H. D. MARCUS, D. D. S.

Dangers of Extracting.—Some weeks ago an elderly gentleman presented himself for the extraction of a number of teeth that had been worn down by attrition. He appeared to be in good health, yet he said he was under the care of a physician. After making numerous inquiries, I told him that he had better consult the medical man who had been attending him before I gave my advice upon the matter, for I learned that he had had an attack of paralysis some time before, and I feared the result that might follow the removal of so many teeth at one sitting. But the patient became very persistent, as the teeth had jagged edges which were beginning to irritate his tongue, and wished to have the operation commenced at once. I told him that I would consent to take out one tooth that was a little loose. That tooth being removed under a local anesthetic, hemorrhage commenced, and I suppose it was three-quarters of an hour before I could stop it. I saw no more of him, but learned that he died suddenly of paralysis about a week after the extraction. Now, had that gentleman fallen into the hands of anyone who was in the habit of giving nitrous oxide gas, and those teeth had been all extracted at one time, no doubt they would have had a death in the chair —*Dr. David Genese.*

ENFORCED CLIMATE AND DIET AS AFFECTING THE TEETH. EXTRACTS.

DR. J. T. CODMAN, BOSTON.

All problems relating to a solution of the causes of the decayed teeth of the human race are worthy of most thoughtful consideration.

More particularly should they interest us, as the object of our calling is especially for their care, preservation and restoration.

In offering to you this humble tribute of thought, it is my hope that it may awaken an impulse to search with greater scrutiny for causes hardly yet investigated and certainly not yet brought under universal consideration.

If I begin by saying that harmonious physical surroundings and harmonious diet with proper heredity should produce perfect men, women and children, this result will follow as naturally as cause and effect; that is, given healthy, prenatal and antenatal conditions there would be universal health and no such thing as decay of the human teeth.

But as we look about on every side what do we see? Instead of a race of ideally perfect beings, only an undeveloped and largely a physically and mentally diseased race, and as we know that man has made but few of his mental and physical surroundings, we conclude that his surroundings have mainly made him; and that they must be to a large extent inharmonious, for had they all been harmonious, perfect harmonious beings and healthy races would have been created from their influences.

It has been considered scientific to say that man is an omnivorous animal; but, glancing at the structure of his body, it becomes a question whether the condition in which you find him as an omnivorous eater is a true and normal one.

Certain well-known facts regarding his physical formation, such as the long intestine, the delicate and non-pointed teeth, the weak-muscled jaw and its lateral motion, which belong solely to the graminivorous animals, have led many profound students of physiology to believe that normally man is not an omnivorous eater; but one of fruits and grain.

If the race of man is not *per se* omnivorous, and eats omnivorously, such a condition must bring about deplorable results from the violation of one of the primary conditions of health; that is, strict obedience of the physical laws of diet.

A new-born child is not responsible for the country into which it is born, but it is evident that if born among the Esquimaux its diet after it leaves the breast cannot be like that of the child born in sunny

France or Brazil. There will be found no whale-blubber in the French Alps nor pineapples in Lapland; yet the child born in either country will live and grow to maturity and old age.

Man is the choicest product and the most helpless of God's creation at birth; but finds protection provided for him in the parental instincts. Launched amid wild and savage beasts, weak, feeble and naked, he finally feeds, clothes and defends himself in spite of his delicate organism by the cunning of his brain and hands, and subdues the forces of nature to his uses. Before he learned to build houses, if there was such a time, he hid himself in caves to protect himself from storms of wind and rain, or he wove the branches of trees for a habitation, or he climbed into a high tree top, where no wild beasts could follow, for security and home.

I am satisfied that the earth's condition at a time not beyond tradition was very different from the present in its relation to food supply. That the earth at one time was covered with verdure from pole to pole; that the elephant and the mammoth dwelled once in the umbrageous shades of the polar region and mendered amid its giant trees, hardly admits of a doubt. From the nature of its vegetation, the remains of which are still found, the climatic temperature must have been mild, and a more equable climate extended over the whole earth than at present exists.—*Internation.*

The Long Retention of Temporary Teeth.—A youth of nineteen, whose right superior cuspid gave no evidence of eruption, came to me many years ago in reference to the matter. The temporary still held possession, and distinguished members of the profession had advised letting it alone, saying, “It will not do to risk extraction; another tooth may never replace it. Better have that than none.” I wanted a permanent cuspid to match a beautiful one on the left: so earnest was my desire that I fairly longed for it, and resolved to go in pursuit. With a minute probe I pressed steadily upward and inward through the gum and alveolus to a point just beyond the apex of the temporary root, and *struck enamel!* This was interesting, and brightened my way for further discoveries. I queried with myself as to the next step to take. The deciduous obstructor stood in the way of progress, and I extracted it at once. With this removed, I regarded the case as an incident in “oral gardening,” and proceeded to mellow the soil around my dental plant that it might sprout and grow. It was bone-stayed and gum bound, but yielded readily to culture. There have been many dental pearls, in all generations, bound in bony cells, that awaited only an inventive mind and benignant touch to bring them to the light.—*Dr. Clowes.*

PYORRHEA ALVEOLARIS.

DR. J. L. WILLIAMS, IN FIRST DIS. SO., N. Y.

It seems to me that there is a great deal of difference of opinion and mystery hanging around the real nature of the trouble itself; and the treatment, of course, differs according to the conception of what the trouble is in its origin,—whether it is purely local, which it seems to me is a contradiction in terms, or whether it is a local expression of a constitutional disturbance. The view that is taken of the disease will determine the treatment. If it is a purely local trouble, surgical treatment is all-sufficient. But it can hardly be that, even if the immediately antecedent deposit of lime-salts around the teeth were sanguinary or salivary, because even that deposit indicates a perverted physiological condition somewhere in the body. If the immediate antecedent of pyorrhea be atrophic dispesia of the connective-tissue elements, then it must be a local expression of a constitutional disturbance. If it is a local expression of a constitutional disturbance, what right have we to expect local treatment only, whether surgical or medical, or both, to prove more than palliative? Of course, the progress of the disease is generally slow. The advanced cases have been a long time in coming to the condition in which they are found, and a purely local treatment, either surgical or medical, will for a long time palliate the difficulty; but if the disease is a local expression of a constitutional disturbance, then it seems to me such treatment must be purely palliative, and that it is not scientific to say that a cure had been effected by it. If the treatment springs from some constitutional disturbance, is it not sure to return unless that constitutional disturbance is corrected?—*Cosmos.*

ST. PAUL, MINN., February 15, 1889.

Editor ITEMS:

The ITEMS is on the right track in mixing literature with science.

It is certainly a great relief after wading through the verbiage of scientific papers (so-called), and the discussions of the mutual admiration societies, to pick up your bright and newsy journal and catch a glimpse of something besides bacteria cells, phosphates, etc.

Your journal is always perused before other dental literature, and my patients frequently catch it up for a moment, while waiting, and become so interested in an article as to ask to take it home to read through. I wish you the utmost success in editing, and publishing a journal of so high a standard.

I am very truly yours,

D. W. McCOURT.

Extracting to Regulate.—The rule is that it should not be done, but there are exceptions. I treated a case this winter of a young lady with regular features, and a beautiful set of teeth so far as their shape, material, and color was concerned, but the left superior cuspid was very obtrusive and gave a coarse appearance to a face that would otherwise have been refined and pleasing. The occlusion of the teeth, with the exception of this cuspid and the adjoining bicuspid, was almost perfect. I extracted the first bicuspid, thereby allowing the cuspid to drop into a less prominent position, the result of which was to greatly improve the young lady's appearance. No appliance was used, and the usefulness of the extracted tooth was not lost, for it is doing service now as an implanted tooth in the mouth of a gentleman.

Another case that I want to speak of is that of a sister of this same lady, about nineteen years of age. Her teeth were very similar in structure and shape to her sister's, but the right superior central was unduly prominent, being forced forward outside of the arch. Some three years of that young lady's life, she said, had been spent in a dental office: she had had her teeth regulated two or three different times, and they had reverted to pretty much the same type of irregularity that they presented in the beginning, but not quite so prominent. Extraction of the superior right first bicuspid, and a little appliance, changed entirely the expression of the mouth. Certainly these are cases where extraction is not only justifiable, but where it would be almost criminal not to extract.—*Dr. Jarvis in 1st Den. So. N. Y.*

No Drug to Cure Insomnia.—“I have recently met with several cases of insomnia due to over-taxation of the American nervous system, and have been requested to prescribe some drug that should be effective to produce sleep and be at the same time harmless. No such drug exists!

“There is not one medicine capable of quieting to sleep voluntary life that has been working ten hours at high pressure, except it be poisonous. Consumption of chloral, bromide in some form, or opium, has increased in this country to an incredible extent, is still growing, and a large number of Americans go to bed every night under the influence of poison. Sleep thus obtained is not restful or restorative, and nature sternly exacts her penalties for violated law, more severely in these cases than in most others.

“Digestion suffers first—one is rarely hungry for breakfast, and loss of morning appetite is a certain sign of ill health. Increasing nervousness follows, till days become burthens and poisoned nights the only comfortable parts of life.”—*Dr. Wm. F. Hutchinson, in the American Magazine for July.*

About the Way Most of 'Em Feel.—“Young man, I am a physician, and therefore have neither time nor inclination to give attention to such small subjects as tooth-doctoring, or what some are pleased to dignify as dental surgery. No, young man, I am an M.D., and my advice to you is, if you really desire to become a *professional* man, go to college and get your degree of M.D.; you can then fool away all the balance of your days on teeth if you wish. I am sure no respectable physician will raise any objections. I rather think they would commend it. In fact, I, as an old member of the medical profession, would be glad to see some of our M.D.'s take up that specialty. It would help us physicians who pay no attention to such things, and we would then have some one with whom we could consult in obscure cases of disease without lowering our dignity as professional men; for, do you know, those infernal things called teeth play the very mischief with some of our patients, so that at times we are at our wits' end to know what to do next. Several times of late that modest fellow, with the absurd title of D.D.S. stuck at the end of his name, has helped me out of scrapes with my patients by telling me what was the trouble; but then he knows some things about medicine and is a good, honest fellow; so, you see, I don't mind consulting him, especially as he saves me a great deal of trouble by attending to my children's teeth without costing me much. Yes, sir, go to college *first* and get your M.D. degree, then you can fool around teeth to your heart's content, and if you should blunder sometimes it won't make much difference; we medical men will stand by you. That's my advice without a fee.”—*Extract from an article by Geo. H. Chance, D.D.S., in Ind. Pract.*

ED. ITEMS.—A fellow, about 5 foot 2 inches high, portly and bald-headed, is on the road with a so-called local anesthetic, as his invention. He claims total anesthesia, whatever the condition, and no bad after effect—even to total preventure of soreness after the teeth is extracted. He does not sell the “anesthetic,” but the Recipe for making it.

We were unfortunately “taken in.” To-day is eight days since the anesthetic was applied, and the patient (a lady) is still confined to her bed and suffering much. She was healthy and strong before the operation.

Whether the solution contains a poison or not, we can't say, but the conditions at present might warrant such an assertion.

We had two cases, both effected similarly. Our object in writing the above is to tell what our experience has been, and if any body thinks of purchasing, to give them more light than we had, and to warn all who may come in contact with this man.

H. S. H.

To Mend a Broken Cable.—Dr. E. H. Raffensperger writes in the *Ohio Journal*: A quick and easy way of mending a broken cable of the White engine is to take one of the brass tubes used in the manufacture of the little brushes for cleaning teeth which we use with the engine, and with a suitable instrument split the tube so it will just slip over the cable; place the broken ends of the cable in the tube, with a little piece of soft solder over the split; hold the "splice" in the flame of the spirit lamp and in a moment you will have a good strong joint which will in no wise interfere with the running of the engine. Of course the ends of the broken cable must be free from oil and dirt before the solder will hold.

Reflex Action.—A Frenchman called and insisted on having the first left superior molar extracted. A careful examination failed to reveal any cause for such an act. Stimulating lotions would give immediate relief, though of short duration. After suffering for two days and nights, he determined to sacrifice the tooth. He was certain that this was the offender, as it would cease when counter irritants were applied. I was quite certain that the origin was elsewhere, and made an examination of the inferior teeth and soon found a cavity in the six-year molar (lower), pulp exposed and inflamed. By accident I struck the pulp and, as a natural result, the patient jumped, and declared that I was probing the pulp of the upper tooth, and again insisted on its removal. Only by the aid of his wife did I convince him that I was working in the lower tooth. I finally succeeded in procuring his consent to have the lower tooth out, which resulted in a cure.—*L. Milliron in Archives.*

Abscess of the Antrum.—A few months ago a miss of fifteen called to have some teeth extracted. After an examination, I informed her that an abscess had formed in the antrum, and inquired if she experienced any odor or discharge from the nose. "Yes," said she, "that comes from the catarrh, for which I have been under the doctor's care for over two years."

Is your throat affected? "Yes, and my eyes."

Did your physician attribute your catarrh to any disease of the teeth? "Not to my knowledge."

Have you ever experienced any severe pain from your teeth? "Nothing more than a dull ache."

Miss, in my estimation, your catarrh is wholly caused by an abscess in the antrum. It is useless to state that after the extraction of the six-year molar, and two weeks' careful treatment, the catarrh is entirely cured, and at present the patient is in perfect health.—*Dr. L. Milliron in Archives.*

LOWER DENTURES.

DR. L. P. HASKILL, CHICAGO.

Were it not for lower dentures, full or partial, the task of the prosthetic dentist would be a far more pleasant one.

From the very nature of the case, it is not to be expected that an average lower denture can be worn with as little discomfort as an upper one. The latter covers a broad surface, and is held in place by atmospheric pressure. The average lower simply sets upon a narrow ridge, often of thickened membrane, and generally more sensitive than the upper, with rarely, if ever, any adhesion, and if of rubber, is easily moved by the tongue and lips.

For some reasons (and I wish some one would inform me why) there is usually more absorption of the inferior than of the superior ridge, and that, too, when no plate has been worn, as is often witnessed, where the posterior teeth have been extracted for many years.

I have for a long time advised and made use of heavier plates than rubber on the lower jaw, for the purpose of keeping the denture from displacement, and for this purpose have made use of the cast metal plates, believing they were better than anything else. But I am forced to the conclusion that they cause additional absorption, which increases the patient's difficulties. And yet I have found little trouble with the continuous gum dentures, heavy though they are.

There is often a supersensitiveness of the membrane, arising from a disturbed condition of the stomach and nervous system. I have had several marked cases of this. One case was that of a gentleman whose business and sedentary habits taxed his energies, and for whom I had made an upper and lower denture. The upper occasioned him no trouble except when the lower was out of the mouth, and then he would nauseate immediately; the lower one was constantly irritating, till I found it necessary to make a new plate; this I made of Watt's metal; the same trouble continued for a year or more. His wife finally prevailed upon him to take a vacation, and he was absent two weeks at the seashore. When he returned he told me the trouble had all ceased, but after attending to business again, he began his calls for relief. After a time I made him the third set, but just at this time his wife persuaded him to go West and remain for several months. Upon his return he told me that although he had worn his old plate during his absence, he scarcely realized he had teeth in his mouth. Soon after this he sold out his business, and has lived out of doors much of the time for two years, but has no more trouble with the lower plate.

Of course, when there is a deep ridge, all troubled is avoided but I find of late years these are rare, more so than in former years, but why I cannot tell.

Very much depends upon an exact articulation. It is often the case that there is undue pressure upon the second molar, which will cause displacement and irritation of the membrane, relief for which, of course, is in grinding.

There is a class of cases where, in full sets, the space to be occupied in front is very wide between the alveolar borders, and yet at the extremities there is scarcely room for more than the first molar. In these cases there is a constant tendency to crowding forward of the plates. It is owing to unduly short rami. My attention has recently been called to this shortness of the rami by Dr. Talbot, in his investigations upon the etiology of irregularities. Sometimes I have found, after a few years' wear, the lower plate has been forced forward so that the teeth closed outside of the upper set, and the gum had been injured. Whenever this occurs it is a source of trouble to dentist and patient. The only thing to do is to make a new set.

As a rule, full lower dentures are preferable to partials, as then the pressure is distributed over the whole jaw. Still, I do not advise the extraction of the anterior teeth if sound and firm.

In making partial lower dentures, everything depends upon a perfect fit, more so than in an upper, and yet many of these cases are very difficult to secure impressions of. And this difficulty makes it all the more necessary to take the impression in plaster. Of course, it often breaks, and into many pieces sometimes, but they all go together, and the result is a perfect impression not otherwise obtainable.

If any one will inform me how to make lower dentures so they will occasion no more trouble than upper ones, I will willingly pay for the information.—*Ohio Journal*.

TO MEND A BROKEN CABLE.

Dr. E. H. Raffensperger writes: A quick and easy way of mending a broken cable of the White engine, is to take one of the brass tubes used in the manufacture of the little brushes for cleaning teeth which we use with the engine, and with a suitable instrument split the tube so it will just slip over the cable; place the broken ends of the cable in the tubes, with a little pieces of soft solder over the split; hold the "splice" in the flame of the spirit lamp, and in a moment you will have a good strong joint which will in no wise interfere with the running of the engine. Of course, the ends of the broken cable must be free from oil and dirt before the solder will hold.—*Ohio Journal*.

Irregularities of the Teeth.—By Dr. Eugene S. Talbot, is, of course, a masterly essay, because issued by Dr. Talbot. He is an original and thorough investigator.

The Beginning of Life can only be reasoned out. We know that we have passed through a stage of evolution. Spontaneous generation was called out and followed up, but did not go far till it was proven to be a chimera. We find life is persistent throughout the atmosphere. There may have been a point, as evolutionists claim, in the existence of the earth when the circumstances were just right, and when spontaneous generation of life was possible; but all our analogies teach us the opposite. So we come back to that creative fiat that I acknowledge, and while the eye cannot penetrate the veil, it recognizes a creator behind. This life is not eternal. I have argued that behind all this there is something that we cannot fathom, which directs and guides this form of life. I think physical life is limited.—*Dr. W. X. Sudduth.*

Treating Children.—My first effort is, if possible, to get the confidence of the little one and do away with the idea that it is my only province to cause pain; then having accomplished this, select some easy cavity, fill it, and dismiss with a very short sitting, for a little child is easily hurt and cannot endure long fatigue.

A child thus treated will usually come for the second visit much more readily than at first, and I can then do more, even tho the operation may be much more tedious and painful. Oxyphosphate is just the thing to use in crown cavities as it sets quickly and will harden under water if kept dry for one minute. I have not found it so reliable in proximal cavities, as it seems to fail by disintegrating at the cervical border.

A Fairly Intelligent Man cannot fail to pick up stray crumbs of knowledge from watching even an *average* operator; while the benefit to be derived from the study of the manipulations of an *expert* is incalculable. Little points of weakness, dexterity, time-saving and pain-saving expedients are minutie which, apart from the practical principles of any particular operation, should be observed and mentally digested. This method of self-education is, of course, principally associated with clinical work; but the intercommunication of thought on professional subjects is apt to be forgotten or neglected in its literary aspect, much to the detriment of ourselves and our patients.—“*Nemo*,” in *Dental Review*.

A Life-preserver has been patented by Mr. Samuel Pemberton, of Alpena, Mich. It consists of two hollow belts connected together at one side by a tube and at the opposite side by a bellows, the bellows communicating with one of the belts and forcing air through both of them, the apparatus forming an inflatable harness.

For Our Patients.

A DOCTOR'S STORY.

Mrs. Rogers lay in bed,
 Bandaged and blistered from foot to head,
 Bandaged and blistered from head to toe ;
 Mrs. Rogers was very low.
 Bottle and saucer, spoon and cup,
 On the table stood bravely up :
 Physic of high and low degree ;
 Calomel, catnip, bonset tea—
 Everything a body could bear,
 Excepting light and water and air.

I opened the blinds ; the day was bright,
 And God gave Mrs. Rogers some light.
 I opened the window ; the day was fair,
 And God gave Mrs. Rogers some air.
 Bottles and blisters, powders and pills,
 Catnip, bonset, syrup and squill,
 Drugs and medicines, high and low,
 I threw them as far as I could throw.
 "What are you doing?" my patient cried ;
 "Frightening Death," I coolly replied ;
 "You are crazy," a visitor said ;
 I flung a bottle at her head.

Deacon Rogers came to me,
 "Wife is comin' round," said he ;
 "I really think she'll worry through.
 She scolds me just as she used to do.
 All the people have poohed and slurred—
 All the neighbors have their word ;
 'Tis better to perish, 'some of 'em say ;
 'Than to be cured in such an irregular way.'"

"Your wife," said I, "has God's good care,
 And his remedies—light, water and air,
 All the doctors, beyond a doubt,
 Couldn't have cured Mrs. Rogers without."

The deacon smiled and bowed his head ;
 "Then your bill is nothing?" he said ;
 "God's be the glory, as you say ;
 God bless you, doctor, good day! good day."

If ever I doctor that woman again,
 I'll give her the medicine made by men.

Medical and Surgical Reporter.

ALL ABOUT AN ACHING TOOTH.

He was a tall, cadaverous looking fellow, and his voice had a nasal twang that indicated the unmistakable "Yank."

"Biz'nes kinder brisk, I reck'n," said he to a rural dentist on whom he had called.

"So, so," the doctor replied, inspired by the hope that 50 cents, at least, would soon be added to his available assets.

"Upset'n good many ivories I kalkerlate," said the stranger, while seating himself in an easy arm chair, with his tall, bell-crowned hat on his head, and throwing his legs out at right angles from his body.

"Well, a few," was the laconic reply of the expectant Knight.

"Yank 'um out generly, on the first yank, eh?"

"Most generally,"

"Do they howl like steam ingins when the yank is goe'n on?"

"Oh, not much!"

"I reck'n, squire, they kinder upset the cheers and spill pokerry-juice on the keerpet ons't in a wile."

"Never!"

Don't they kinder shy off a leetle, as old Bill Slatterly sez about his new hoss, when you put the jaw-smasher on their chewers?"

"Sometimes nervuos people, when about to have teeth extracted exhibit a little cowardice," "but why do you ask these questions? and what can I do for you?"

"What is your terms for a single yank?"

"Fifty cents is the usual price," the dentist replied, hoping that his visitor was getting down to business.

"How many yanks kin an able-bodied man yank in a day," he asked, after removing a large quid of tobacco from his mouth and throwing it into the fire.

"About twenty-three thousand," said the doctor in utter disgust.

"That's all, squire," he replied, rising slowly from his seat, "I am kinder tak'n the sentzes of this ere town and I kinder reck'n sum folks is mak'n fortins in it uncomly quick."

"Is there anything more I can do for you?" asked the dentist while accompanying his visitor to the door.

"I don't care if I do squire see'n as how its you," he said, wheeling about quickly, and giving the doctor a friendly punch in the ribs. "If you've got some good old apple jack or any kind of tip top licker, I'll take a smile with you, by gosh."—*The Practical Dentist.*

Short accounts make long friends, is an old and true saying.

Editorial.

DEATH ; SHALL HE BE A FRIEND OR A FOE ?

Who and what is Death ? Can we be so ignorant of his character and haunts as to make such a question necessary ? Most of us act as tho we were a stranger to him, or at least that we would like to be. Such a hideous monster do we consider him, we creep around into every protected corner lest he should find us. And yet, if we can judge most people by the freedom and indifference with which they live on the verge of danger and ruin, we should believe them to be dilligently looking for Death ; that they were inviting him to their dwelling.

God intended Death should be a kind messenger sent to conduct us over the river when our work is done on this side. Even if there been no fall from grace, it is not likely we should always have lived here ; our translation as Enoch or Elijah to heaven would have been certain, when we had ripened for the change. If in this spirit and character, we could receive Death, we should find him our friend ; or, at least, be able to shout to him :

“ O Death, where is thy sting
O Grave, where is thy victory ? ”

He would carefully and painlessly brush from us the dust of earth, bathe us in the calm river of death, and press us on to be clothed with the habiliments of heaven.

Why look for him before his time ? If we are so indiscrete as to invite him prematurely, he will be accompanied by a stern companion, Pain, who will drag us by the help of disease down to the river's brink through much tribulation. And yet, tho we all profess to abhor Death, we frequently invite Disease to take us to visit him. The beautiful Angel of Life is ever wooing us into the high way of Health, that God has cast up for those who obey his laws. Here Health leads his followers over the bright hills to the ferry, where Death is prepared to carry us triumphantly over the water. Yet, at the beck of Disease, we are ever turning aside into by and forbidden paths, that lead through miasmatic swamps, to meet the cold surging billows in darkness, struggle and disaster.

Ah, yes ; Death was not intended to be such an early or cruel visitor, but we invite him into our houses by all manner of means, and then complain because he comes so quickly, and is accompanied by such grim companions as Disease and Pain.

See the ruddy cheeked peasant with his cheery family, from his hearty country home, as he crowds into the damp, cold, filthy tenant

of the city ! Outside and inside are decomposing animal and vegetable matter, molding wood, and the effluvia of crowded, diseased inmates, filling every room with poison ! Is not this father inviting Death to visit him ? Yea, verily. Here Disease is busy preparing the little innocent and promising youth, and burdened parents for the premature visits of his master, Death.

Health comes on the wings of the wind to all our households, bidding us clear every nook and corner, and offering us the elixir of life to sweeten every room. But O, how many shut him out. Some of us who should be wiser than the poor peasant, shut ourselves up, stopping every crack and actually defy the beautiful messenger in wind and sunlight to enter our dwelling, while we invite the forerunners of Death to hide in every cupboard and lurk in every room.

There are a thousand ways in our eating and sleeping, in our frolics and luxuries, in our habits and excesses, which we knowing use to bring us into the arms of Disease that he may torture us and carry us prematurely to Death; knowingly, for Disease has his peculiar breath, and we might avoid him if we would. He clothes himself in many a gorgeous hue, and comes in many an attractive form, yet he cannot rid himself of the peculiar scent of his person, which warns us of his approach in spite of all disguises. How different is the sweet-scented breath, and the delightful effluvia of health ! Strange that we do not always choose his company and avoid his enemy.

The International Tooth-Crown Company dies hard. The reverse decisions of the courts have crippled it, and the determined defense of intelligent dentists has very greatly weakened its influence, and yet it proposes a final struggle in the Supreme Court of the United States, before it dies. Unless dentists combine to meet them in this Court, their final struggle will be their final triumph, and dentists must not complain of multiplied taxes indefinitely prolonged ; for they are not only determined to fasten on the profession a tax for their tooth-crowns, but we are informed they have already bought up many other patents they mean to push against free manipulations among dentists. This company, in character and audacity, really seems to be the *Goodyear Dental Vulcanite Company* over again.

The Dental Protective Association of the United States proposes to take charge of *all* suits commenced by *The International Tooth-Crown Company* against any dentist who unites with this new association, if such member comes in before such suit is commenced by the I. T.-C. Company. Every dentist, therefore, should respond immediately. Address J. N. Crouse, 2231 Prairie Ave., Chicago, Ill.

LEARN TO EXPRESS YOUR THOUGHTS CORRECTLY AND ACCEPTABLY.

It is the duty of every man, especially of every man of literary or professional pursuits, to learn to clearly represent in words what he knows.

Yet few learn this well. The efforts of many are blunders, and their awkwardness and inaccuracy are embarrassing. They have valuable thoughts and plans and enterprises, but they cannot clearly describe them; they are successful manipulators and investigators, but they cannot explain the process. Many points of skill, invention, and science would make the world richer if they could be formulated into appropriate language, but they have not learned the art. A few rattle off words, by speech or pen, mistaking quantity for quality; but many others are utterly deterred from expressing their ideas at any great length, either in conversation or magazine, by believing themselves incompetent to use words accurately and acceptably.

Can this be overcome? Yes, if you will pay the price. Don't be deceived by the idea that good speakers and writers are born, not made. When you hear a man speak fluently, with precision and clearness, without labor or self-consciousness, your first thought is, This man is a born orator. And when you read a favorite author, made your favorite by valuable thoughts, framed in clear, rich sentences—sentences so wonderfully constructed that the fitly chosen words make clusters of diamonds, so exquisitely shaped and polished as to be beautiful lenses, through which you see the author's thoughts magnified, beautified, glorified—you instinctively exclaim, This man has lived with the gods!

But really, these men have been through years of patient, laborious, self-sacrificing training. A little speech, that slips through lips so naturally and fluently that it seems impossible it should represent any preparation, has, likely, cost days of close study, not to see how loquacious he can be, but how much can be said in the fewest and most forcible words. An article that appears on the printed page as a picture of life and inspiration, without a mark of conscious effort, has, perhaps, been written and rewritten till patient labor has done all that is possible to improve its clearness and beauty. Tho you can read it in ten minutes, it has cost the writer hard work for ten hours. Good speaking and writing means much research and industry. A great speaker was once asked, "How long did it take you to prepare this speech?" He replied, "Forty years, sir. All the culture I have been able to give myself in collecting and handling facts, and in gaining power and inspiration in presenting them, for forty years, is seen in every speech I make, and in every article I write; and still I am a laborious student."

Would you be like one of these? Then pay the price. You may not, in any event, by any toil, imitate another, but you may so enrich and cultivate and polish your own faculties, so ennable and enlarge and harmonize your individual character, so concentrate your purpose and thoughts and skill on some specialty, as to shine in a brightness quite your own. Another may have greater talents or genius, but you may have good common sense; another may have a greater flow of words, but you may have precision; another may have a more popular style, but you may have clearness. Your words may be familiar and your sentences without conspicuous adornment, and so it is with some of our most forcible writers. The main thing is to say correctly, concisely, and precisely what you mean.

But to attain this correctness and acceptability in expression.

1st. There must be an appreciation of its value. Many writers do not seem to care or think of the errors and awkwardness of their composition. They have no style. To convince them that a sentence of fifteen or twenty words could be as clearly represented by eight or ten, does not concern them; it is no embarrassment to be told that their ideas are bunglingly and faultily expressed. What care they for style? They write as they speak, and speak as they live, and live as they have come up—in a haphazard, loose-jointed, clumsy manner. And in like manner they pass on, slipshod and ungainly, because they are really too lazy to walk uprightly and to dress respectably, or too ignorant to see themselves as others see them.

2d. We must patiently study our words. Those of doubtful meaning, or inappropriate, far-fetched, or inharmonious, must be avoided, and words chosen and properly arranged that precisely represent what we mean. This requires more study and discipline, and more thoroughness and accuracy, than many suppose, and more patient labor than most of us are willing to give. We unconsciously use many words that are quite unmeaning, or at least indefinite—use them because we have been accustomed to use or hear them, but without any standard authority. We are finally astonished at our incorrectness. If we became accustomed to weigh and arrange our words with precision, we should soon see in them pointedness and power that would astonish us. A sentence, the words of which constitute a pleasing picture, or that radiate the glory of pearls, is certainly preferable to straggling, scrawling, repulsive words, or those kicking and knocking one another about for want of harmony, that is, unless we are fighting or our spirits that are all awry.

3d. We must study the art of composition. It is a definite field for special labor; and tho all literary knowledge and discipline lead up to it, no person can successfully enter it without making its

pursuit his distinctive labor. There may be a superior natural gift, but there must be a training in methods. Without special study there may be a jingling of words, a dash of brilliancy, an outburst of eloquence, but for the jingling to be beautiful, for the brilliancy to be lasting, and for the eloquence to be sustained, there must be behind all a thoughtful, plodding, painstaking work, a cultured, discriminating, esthetic taste, and accurate, ready, appropriate knowledge of composition as an art.

4th. We must become so familiar with the requisites of this art as to speak and write with unconsciousness of its demands. A labored style is a bad style, tho it has every element of correctness ; and nothing but long-continued, varied, and practical work will give a style that is easy, free, and familiar. A school-boy's penmanship and a school-boy's composition are much alike. Neither is to be tolerated, except in the school-boy. This stiffness and awkwardness, which comes from immaturity and inexperience, will gradually be exchanged for nimbleness, appropriateness, and readiness of utterance, if mere scholarship is merged into the demands of life's work. Yet no hurry or worry or necessity of a busy life must be an excuse for ignoring the teachings of correct theory and good books. Our most rapid efforts must be the embodiment of the art reduced to practical value.

As fine an accomplishment as this is, a few hours each week devoted to the proper reading, study and practice, will accomplish it.

EXTRACTING TO REGULATE.

There are instances when it is wise to extract to regulate teeth, and to keep them from overcrowding, but we are often thwarted in our expectation because we have not taken into consideration the general rule for the natural movement of teeth from back forward, and not from forward back. Our usual thought in seeing a crowded set of teeth is, that as the molars have come in, there has not been room for them, so that a crowding forward has been inevitable. And there is sometimes truth in this thought. But generally there is not so much truth in it as we suppose, and the extracting of a tooth does not give the relief we expect.

As the permanent molars take their place in the jaw, *the jaw is made* to give them place, and they are not required to crowd themselves into the place of other teeth. There is an actual elongation of the jaw in proportion to the space required. This elongation of the jaw is backward, caused partially by the presence of the molar resulting in an excitation of building vessels which produce growth. Even with the third molars this is the case. Sometimes you look into a youth's mouth and say, " Well, you will have a hard time getting your wisdom-

teeth, sure ; for there is absolutely no room for them." Such dentists forget that as there comes pressure from the incoming tooth there will be elongation of the jaw to give it place.

It is this wise provision of nature, that so changes the features from that immature and comparative characterless appearance of childhood to the physiognomical expression of intelligence and manhood of matured youth. We can, therefore, often, perhaps generally, tell without examination, if these "*wisdom*" teeth are erupted. It is this natural, normal pressure of the molars backward, causing this elongation of the jaw, that largely prevents irregularity.

We are sometimes told that extracting a tooth causes the jaw to contract. This is not so, tho it does decrease the expansion of both the jaw and alveolus process, if a tooth is extracted during their growth ; so that such extraction may not only not help irregularity and crowding, but actually increase both.

Irregularity comes quite as frequently from a lack of growth of of alveolus as of jaw ; and quite as frequently from the teeth occupying the inward rim of the alveolus instead of the outward, as from actual want of room. In a large majority of cases of irregularity, if the teeth are helped toward the outer rim where they belong, the arch will be so increased there will be found abundance of room for the teeth.

This, of course, does not include the class of prominent front teeth caused by a prominent arch. A little observation will show that, usually, this prominence is not caused by crowding forward of back teeth, but by an abnormal, or at least by an unusual, growth of alveolus. Teeth in these cases are seldom even in contact, much less crowded.

The Editor of the International Dental Journal is evidently doing his best to make that the leading journal of the profession. He is unremitting in his toils, unsparing in his expense, and exhaustive in his researches.

Artificial Crowns by Dr. J. J. R. Patrick, of Bellville, Ill., is a valuable pamphlet. Such essays from successful men, on these specialties, should be read and *studied* by every dentist.

Transactions of the Odontological Society of Pennsylvania for 1884 and 1885 is received. Rather late, but perhaps its value makes up for the delay. This Society certainly contains some of our most learned and skilful dentists.

If the dentists all over the country were as active, and as intelligent in their activity, as some dentists of Chicago, there would be a wonderful "*revival*," as we—Methodists say—in the profession.

PROF. J. H. M'QUILLEN, M. D., D. D. S.

The portrait of this prominent man in the history of the Dental profession will be hailed with warm approbation, not only as the representative character of the Philadelphia Dental College, but as, while he lived, one of the leading and most self-sacrificing spirits of the profession. As founder of the Philadelphia Dental College, as associate editor of the *Cosmos*, as one of the organizers of the American Dental Association, and as a frequent and always practical and useful contributor to Dental literature, he was honored above most of his contemporaries.

He died in 1879, tho' his memory is so fresh that it seems but a short time since he was among us.

PHILADELPHIA DENTAL COLLEGE AND HOSPITAL OF ORAL SURGERY.

This institution enters just now on its twenty-sixth year and has to-day the largest class of its kind in the world.

As originally established, this school was wholly and purely a college of dentistry; as it now stands, it is a large hospital, showing and teaching, not only mechanism, but offering opportunities for information and experiences in every direction of surgery and medicine as well as dentistry.

The establishment occupies quarters entirely commensurate with its necessities, while its furnishing impresses us as being quite regardless of cost. Entering the building devoted to lecture and clinical purposes, the visitor finds a museum which, among its other attractions, contains the *Pancoast Anatomical Collection*, the specimens of which are valued at sixty thousand dollars and which shows almost every variety of dissections and pathological illustrations.

The lecture halls consist of an amphitheatre, seating between four and five hundred students, each of whom is provided with an opera chair. Two large inclines, seat after a similar manner, a like number, while smaller rooms to the number of twenty-seven are for purposes of recitations. The halls are reached by a series of flights of broad and easily ascended steps which lead from the entrance door to the dissecting department, which is on the highest floor. Each landing is provided with toilet conveniences; arranged on the most approved modern plan.

On the first floor, beside the museum, is the historical and pathological laboratory, the latter a large room devoted to work in the direction named and which is richly furnished with microscopes and the varied *et cetera* pertaining to its requirements. Here too are the Dean's and other offices. On the basement floor are situated the chem-

ical laboratory and gymnasium. The former is provided with individual desks for the use of students and the latter so constructed that the roughest play can do no hurt to the room.

The surgical clinic of the department of oral surgery is a feature which crowds the amphitheatre with students and visitors every Saturday. The hospital connected with the department is one of the best ordered in the city of Philadelphia and is constantly crowded with patients.

To the credit of this college, they admit lady students, and to the credit of the young gentlemen, these ladies are respected and in every way assisted in their advancement.

The present Dean, Prof. J. E. Garretson is one of the most skilful surgeons living. His clinic operations are sometimes marvelous. His book on Dental Surgery is sought by students in all colleges.

It is in this college the celebrated Prof. J. Foster Flagg is found. He is one of the most prominent men in the dental profession. His notable plastic fillings and his own successful practice with them, are world wide; his work on the subject has a large sale.

Its matriculates for the session just closed has reached the unprecedented number of 226. The graduating class was within two of 100. This is an excellent showing; and what is better it has come as a gradual and healthy growth, the result of the most scrupulous attention to the interests of the students.

The graduates are :

Agnese, Carlos,	Brazil.	Combe, J. Charles,	Rhode Island.
Aguilarry Rodriguez, Florestan, Ph.B.,	Spain.	Doering, F. Emanuel,	Canada.
Apgar, Mary M.,	Dist. Columbia.	Duffield, Joseph E.,	New Jersey.
Baker, Hester J.,	Illinois.	Ellerbeck, George E.,	Utah.
Barnes, W. Egbert,	Italy.	Findley, Harold B.,	Canada.
Bates, George W.,	Maine.	Flanagan, Andrew J.,	Massachusetts.
Belcher, William W.,	New York.	Focht, Annie T.,	Pennsylvania.
Bell, George R.,	Pennsylvania.	Fulkerson, Frederick M.,	
Bennett, Percy,	Australia.		Missouri.
Bertholf, Harry W.,	New Jersey.	Garvin, Jesse P.,	Wisconsin.
Betts, Horace,	Delaware.	Gibson, Fred. W.,	California.
Botz, John H.,	Canada.	Gibson, John W., M. D.,	
Boulo, Peter C.,	Alabama.		California.
Bourgeois, Camille,	Louisiana.	Gifford, Marinda B.,	Massachusetts.
Brush, Demosthenes,	New York.	Gledhill, Thomas C.,	England.
Bustos, Rubens S.,	Chili.	Glover, Harry A.,	Indiana.
Capon, Fred. J., L. D. S., M. D. S.,	Canada.	Glover, John W.,	Pennsylvania.
Churchill, George R.,	Pennsylvania,	Greene, Arthur Y.,	Massachusetts.
Clymer, William A.,	Minnesota.	Gritman, A. De Witt,	New York.
Collins, Joseph P.,	Canada.	Hamm, Frederick L.,	Ohio.
		Harris, James N.,	Canada.
		Hatch, Frank A.,	Massachusetts.

Hillegass, Charles Q.,	Pennsylvania.	Schmidt, Richard,	Pennsylvania.
Hodsdon, William M.,	Massachusetts.	Schurig, H. Hugo,	Germany.
Holberg, Joseph L.,	Mississippi.	Smith, Cyrus U.,	Kansas.
Hunt, W. J.,	Massachusetts.	Snyder, S. C.,	Illinois.
Ickes, Henry A.,	Pennsylvania.	Spring, William A.,	Vermont.
Ireland, Alice I.,	New York.	Stadlinger, Charles H.,	
Jaco, J. William,	Pennsylvania.		New Jersey.
Jewett, Benn C.,	New York.	Storer, William S.,	New York.
Johnson, Albert B.,	Connecticut.	Talbot, Edward S.,	Maine.
Johnson, Harvey C.,	Pennsylvania.	Tiley, Charles B.,	Connecticut.
Jones, G. Cleland,	Delaware.	Thompson, Fred. R.,	New York.
Joslyn, James W.,	New Jersey.	Thompson, W. Irving,	
Kath, Albert,	Germany.		Kentucky.
Keen, Eugene L.,	Pennsylvania.	Thorton, Henry R.,	Canada.
Kelley, J. Edward,	Ohio.	Tremain, William F.,	New York.
Kunze, Arthur H.,	Germany.	Trumbauer, Dalton,	Pennsylvania.
Lettenmeier, Anna K.,	Pennsylvania.	Tunstall, T. T.,	Alabama.
Martin, George R.,	Canada,	Turley, Charles H.,	Pennsylvania.
Mills, William R.,	New York.	Vanderslice, Charles M.,	Pennsylvania.
Mitchell, Leslie D.,	New Jersey.	Varcoe, Charles W.,	New York.
McCaskey, Richard D.,	Pennsylvania.	Ver Valen, David P.,	Brazil.
McCormick, Herbert V.,		Watson, A. T.,	Canada.
	New Jersey.	Waugh, David H.,	"
McFarland, Edgar W.,		Weber, B. Gifford,	Pennsylvania.
	Missouri.	Wellman, Harry W.,	Missouri.
Olmstead, A. Frederick,	New York.	White, Albert C., Jr.,	Rhode Island.
Powell, John D.,	California.	Whiting, James G.,	Illinois.
Pullen, Charles R.,	Canada.	Willmott, Walter E.,	L.D.S., Canada.
Robb, George I.,	"	Williams, J. Alexander,	Canada.
Rosenthal, William S.,	Pennsylvania.	Wood, Dan. M.,	Indiana.
Saxton, D. B.,	"	Yerkes, Eliza,	Pennsylvania.
		Total,	98

Meharry Medical School. Dental Department.—The third annual commencement of this branch of Central Tennessee College was held at Masonic Hall, Nashville, Tennessee, February 21st. The valedictory was delivered by James R. Porter, of Yazoo City, Miss. The faculty address by R. F. Boyd, M.D., D.D.S. Pres. Braden conferred the degree of D.D.S. on the following: Thos. Aulston Curtis, Ala.; Daniel Webster Fields, Tenn.; Stephen Mayberry Hickman, Tenn.; James Bullock Maclin, M.D., La.; James Reynolds Porter, A.B., Miss.; Alonzo Maury White, Tenn. The gold medal offered by Morrison Brothers to the best student in mechanical operative dentistry was awarded to T. A. Curtis, Marion, Ala. This is the only dental school for colored students in the United States; and it is so well conducted that it is rapidly growing in favor.

DENTAL DEPARTMENT OF THE SOUTHERN MEDICAL COLLEGE.

The commencement exercises of the Dental Department of the Southern Medical College was held March 2, 1889.

Rev. Dr. Walker was the Orator.

Dr. B. R. McBath was Valedictorian.

Dr. M. Z. Crist was First Honor.—Gold Medal.

Dr. W. T. Sincalir { Operative Dentistry. " " " Physiology. " " "

Dr. J. A. Link { Chemistry and Metallurgy. Gold Medal. Anatomy.

Dr. A. Branch—Crown and Bridge Work. " "

Dr. D. R. McBath—*Materia Medica* and *Oral Surgery*. Gold Meal.

Dr. H. J. Garland—*Pathology* and *Therapeutics* " "

Best Junior Examination—Mr. E. G. Thomas.

The following 17 gentlemen graduated with honor to themselves and the Institution :

From Georgia, J. A. Arbeely, M. D.; A. Branch; M. Z. Crist (1st honor); O. H. Cantrell; J. W. Daniel; J. W. Duke; C. W. Forehand; H. J. Garland; T. M. Hyman; J. A. Link; S. W. Lide; T. B. Pilcher; from Alabama, R. L. Lane; R. G. Ryan; H. B. Williamson; from North Carolina, W. T. Sinclair; from Tennessee, B. R. McBath, the Valedictorian.

The following resolutions were adopted at a meeting of the dental class of Vanderbilt University, of the session of 1888-89, January 29, 1889.

WHEREAS: We, the dental class of Vanderbilt University of the session of 1888-89, have received gratis, the current issues of the *Dental Cosmos*, *Dental Register*, *ITEMS OF INTEREST*, and *Dental Headlight*; and whereas they have been of untold benefit to us.

RESOLVED, That we instruct our Secretary to tender our thanks to the several publishers. Be it also

RESOLVED, That a copy of these resolutions, be furnished each of these Journals for publication, and that they be spread on the minutes of the class.

R. M. WALKER, President.

S. H. MCKEE, Secretary. O. C. FARISH, Vice-President.

We Must Avoid Effeminacy.—Our occupation as dentists brings it on surely if we do not resist the tendency. Instead of yielding to delicacy, and even encouraging it by our sedentary habits and the nature of our work, we must take every means to strengthen ourselves,—to produce vigor of thought, normality of spirits, and brawn in physical development.

PENNSYLVANIA COLLEGE OF DENTAL SURGERY.

CORPORATORS.

S. W. GROSS, M. D., President.	T. MORRIS PEROT, Esq.
DAVID ROBERTS, D. D. S., Sec'y.	I. MINIS HAYES, M. D.
G. R. MOREHOUSE, M. D. Treasurer.	J. H. BRINTON, M. D.
J. D. WHITE, M. D., D. D. S.	JOSEPH PETTIT, D. D. S.
ALBERT PANCOAST, Esq.	HENRY C. GIBSON, Esq.
EDWARD HOPPER, Esq.	

GRADUATES.

COMMENCEMENT FRIDAY, MARCH 1, 1889.

Ambrose M. Allen...	Pennsylvania.
Ismael Angulo.....	South America.
Clarence E. Bachman, Minnesota..	
William C. Bailey....	New York.
Alois Binotsch.....	Germany.
Scipio Bond.....	Minnesota.
C. Walter Borgner...	Pennsylvania.
Frederick R. Brunet..	Cuba.
Ramon Campuzano...	Cuba.
Julia May Carmen...	New York.
Geo. W. Chamberlain.	New Jersey.
George M. Clark....	New York.
Arthur Perry Clark..	New York.
Edw. Moberg Cooper.	Pennsylvania.
Wm. M. G. Corrie, Ph. G.	Pennsylvania.
Ed. E. Culbert, L. D. S.	Canada.
E. C. Dean.....	Canada.
James L. Diven, Jr...	Pennsylvania.
J. Adams Dyer.....	Canada.
R. W. Edwards.....	New Jersey.
Leon A. Effron.....	Russia.
Milton Rand'h Fisher.	Louisiana.
Gertrude M. Flies....	New York.
Lynn J. Gale.....	New York.
Clarke M. George....	Ohio.
Fred'k Thos. Gibson.	Canada.
Albert H. Goodrich..	Minnesota.
George N. Griswold..	New York.
William E. Grover...	Pennsylvania.
G. A. Guile.....	New York.
William P. Gummer.	California.
Zelopheard Hand....	New Jersey.
Arthur H. Hanington.	Canada.
Edgar Harding.....	Pennsylvania.
F. Kramer Hazelton.	New Jersey.
Henry C. Heyer....	Illinois.
Elmer Ellsworth Hill.	Massachusetts.
Fannie E. Hoopes...	Maryland.
James Homer Hope..	Pennsylvania.
Freed A. Hoyt.....	Minnesota.
W. Edwin Jackson..	Pennsylvania.
E. M. Johnson.....	Minnesota.
O Herschel Johnson.	Pennsylvania.
Abner Jones.....	Ohio.
David Griffith Jones..	New York.
Harry Davis Jones...	Ohio.
N. H. Keyser.....	Pennsylvania.
Harvey Chambers King.	Pennsylvania.
John R. Lane.....	Pennsylvania.
Chauncey Griffith Lewis.	Ohio.
Elmer Clinton Lockard..	New Jersey.
J. Dayton Lowrey.....	Pennsylvania.
Ernestine A. Mergler.	Illinois.
John V. Mershon.....	Pennsylvania.
George Edwin Messick.	Delaware.
W. M. Molyneaux.....	Pennsylvania.
Julio Moncada.....	South America.
Robert Ernest Morrison.	Kentucky
Alex. Fergus McBurney..	Pennsylvania.
Thomas McCullough....	Canada.
Kenneth McDougall....	Pennsylvania.
Bert. V. Needham....	New York.
Frank Culver Pague....	California.
Wilbur L. Pepper.....	Pennsylvania.
Robert S. Ramsey....	Canada.
John J. Reardon.....	New York.
Albin C. Rosenquist....	Minnesota.
David A. Rosenthal....	Russia.
Const'ino Eudoro Salcedo.	South America.
Ignacio H. Santamaria..	South America.
Fried Schlapp, M. C. D.	Germany.
C. Calvin G. Schomo....	Pennsylvania.
Martha Schroeder....	Germany.
John H. Shaw.....	Pennsylvania.
Matthew A. Smith.....	New Jersey.
William H. Snyder.....	Pennsylvania.
Richard S. Starkey....	Canada.
F. Albert Stanger.....	New Jersey.
John C. Stites.....	Delaware.
William Lincoln Straw..	Pennsylvania.
Tomasabro C. Suganuma.	Japan.
Wm. Rutherford Sutch..	Pennsylvania.
Edward C. Truesdell....	Minnesota.
Albert B. Van Osten....	West Virginia.
Monroe L. Vansant, M.D.	Pennsylvania.
D. Porter Vincent.....	Pennsylvania.
Heinrich Volkmer....	Germany.
W. W. Walker.....	Minnesota.
George C. Watson.....	Pennsylvania.
Irvin Norris Wells.....	Georgia.
Frank R. Zahniser.....	Pennsylvania.

THE BALTIMORE COLLEGE OF DENTAL SURGERY.

And now comes the oldest dental college in the world.

The Baltimore College was chartered in 1839, and has kept steady on its course without resorting to any of the tricks of the trade for patronage or celebrity. At its last session there were 118 matriculates; and at its close the following 44 students received their coveted parchment, giving them the honorable standing of D.D.S.:

G. E. Adams, N. J.	L. P. Brown, N.Y
P. C. Carmichael, N. Y.	J. E. Armitage, N. Y.
E. E. Butler, Va.	G. R. Carter, Va.
G. E. Coughlin, Md.	Geo. B. Dorsey, Miss.
F. C. Exley, Ga.	W. E. Hanah, Pa.
A. R. Eaton, N. J.	N. L. Hale, Ala.
J. Hardy, Va.	H. L. Harlan, Ky.
L. F. Hough, Va.	W. D. James, Minn.
A. L. Jones, Va.	G. W. S. Ireland, Md.
B. B. Johnson, D. C.	W. C. Klatte, S. C.
A. Kraus, Roumania.	N. B. Larkin, Tenn.
J. H. Minard, Ontario.	C. L. Morey, Texas.
W. H. Lockwood, Wis.	F. H. Moore, Me.
E. E. Murray, N. C.	J. F. McArthur, Dak.
T. S. McElfish, Md.	O. M. Nisley, Md.
E. G. Powers, Minn.	J. P. Nesbitt, O.
J. N. Penberthy, Minn.	J. G. Robinson, Jr., Md.
F. Rothenbach, Germany.	G. B. Rush, Va.
H. L. Sumption, Va.	J. R. Watson, Pa.
J. P. Whedbee, Va.	W. E. Walker, Miss.
W. R. Spencer, Va.	D. Williams, N. C.
C. Whitney, D. C.	A. E. Whitehead.

The "Smoke" which the *Dental Review* says was "The climax of sociability and fraternal cordiality, for which the Anniversary meeting of the Chicago Society was remarkable," might better be characterized as its greatest folly. It is bad enough for English dental students to have their "Smoking Concerts," but for men of dignity to imitate foolish boys in such a "Smoke" tends to degrade the whole profession said an estimable lady to us, one day, as she came into our office, "Do you use tobacco? "Of course not," we replied. Then you are my dentist. I am disgusted with smoking dentists."

THE NEW YORK COLLEGE OF DENTISTRY.

This college has risen fast. For its last term there were 245 matriculates, and at its close the following 69 graduates were presented with their diplomas:

Arthur Beaumont; William Abraham Berendsohn; Albert Bandmann; Walter Haviland Bedell; Victor Charles Bell; Henry Napoleon Berthiaume. Frank Williard Bridges; William Noble Bush, Jr.; Israel Walter Claypoole; Edwin Cudlipp; Alfred D'Orville Doty; John William Davy; John Marion Edmunds; Stacy Rufus Everett; Ralph Waldo Emerson; Howard Henry Fox; Enrique Rafael Gonzalez; Rudolph Heinrich Egon Guderwill; James Granville Gallagher; Harry Clifford Green; Frank Gilbert Gregory; Samuel Hess; Robert George Hutchinson, Jr.; Henry Heath, Jr.; Cyrus Augustus Jordan, Jr.; Wilhelm Kull; Michael Leo; Moritz Henry Lewkowicz; Edward Francis Lanchantin; William Samuel Loomis; George Mac Nally; Edward Isaac Mead; Pablo Reynaldo Moreno; Ludwig Martin Meyer; William Henry Moon; Michael Moskovich; William Sullivan May; Norman Shakespeare Morgan; George Eugene McKirgan; Henry Frederick Maasch; John Brown Merritt; Ira Leonard Nickerson; John Charles Oberle; Edward Owens; Henry Porter Osborn; Frank Robinson Parsons; Edward Huntley Pease; George Edgar Pool; Alfred William Repelovski; Juan Antonio Riano; William Elijah Rice; Edwin Somerville Robinson; Alfred Drew Seaver; Abraham Lincoln Sterne; Max Sterne; Frederick Richard Smith; Abraham Lincoln Smyth; Raphael Stork; Primus Chadwick Smith; Clarence Warren Steele; Edward Herbert Sears; Edward Herbert Werner; Sigmund Wintner; Robert Moseley Wollison; Heinrich Christian Louis Weber, William Hildreth Weber; George Edwin Trip Ward; Charles Stafford Willson; Edward Waugh; George Elliott Wilcox.

There is probably no dental college in the country that has been more persistent in filling its chairs with the best talent and skill of the profession.

Vanderbilt University, Dental Department, has had quite a good attendance during their last session. There were twenty-five Graduates.

By direction of the president, Dr. W. J. Barton, the 9th annual meeting of the Texas Dental Association is postponed to meet at Galveston, Monday, August 26th, 1889, at 10 A. M.

In consequence of the meeting, of the Southern Dental Association, the appointments and program for this meeting will be suspended.

Further notice of local arrangements will be duly given.

GEORGE M. PATTEN, *Secretary.*

THE MISSOURI DENTAL COLLEGE.

The Twenty-third Annual Commencement of the Missouri Dental College of St. Louis, was held at Memorial Hall on the evening of March 14th. Prof. Henry H. Mudd, Dean, conferring the Degree of Doctor of Dental Surgery upon the following gentlemen: Henry Allen Bragg, Mo.; Jonathan Otis Eppright, Mo.; John Thomas Fry, Mo.; Charles Leroy Hickman, Mo.; Philip Frank Hellmuth, Ill.; William Worwick Holmes, Ill.; Harry Taylor Hyams, La.; Gilbert Wesley Jarvis, Mo.; DeCourcey Bradley Lindsley, Mo.; Eugene Beauharinas Neal, Mo.; Alexander Stark Oliver, Montana; George Harry Pipino, M.D., Ill.; Julius Peter Ruge, M.D., Mo.; Henry Ruutz, Switzerland; Edward Agust Ferdinand Wulze, Mo.; Frederick Edward Weber, Switzerland; Joseph Henry Wilson, Mo.; Adrien Zinsstag, Switzerland.

The Honorary Degree was conferred on Charles Rudolph Edward Koch, of Chicago, Ill.

Prizes were awarded by Prof. W. H. Eames as follows:

St. Louis Dental Society prize, a gold medal, to Adrien Zinsstag, D.D.S. The S. S. White Dental Manufacturing Company's prize, a set of Varney pluggers to John Thomas Frey, D.D.S.; and the St. Louis Dental Manufacturing Company's prize, a dental lathe to Henry Ruutz, D.D.S.

THE INDIANA DENTAL COLLEGE.

During the ten years' growth of this college it has shown commendable advancement. Seven years ago, as I enquired through the State and in Indianapolis of its status and prospects, there were many dubious remarks, as there always will be concerning new enterprises. But today it is claiming first rank among dental colleges, and the list and character of its recent graduates verify its assumptions. At its last session it had 51 matriculants, representing many of the Southern and Western States and Canada. What is still more to its honor, it stands well at home; for 24 of its students were from its own State. The following 17 graduated:

Wm. W. Gates, Ind.	H. W. Cole, Ind.
F. M. Ault, Ind.	P. S. Bower, Ind.
W. E. Callane, Ind.	W. E. Wiessell, Ind.
W. E. Ballard, Ind.	C. S. Hardy, Can.
J. C. Walker, Kan.	B. Moss, Wis.
F. H. Reiss, Ill.	W. Finn, Wis.
C. K. Raber, Wis.	G. B. Martin, Mich.
S. W. Curtis, W. Va.	M. P. Nisnoyer, Ohio.

R. I. Blakeman, Ky.

Let us watch these western boys and see what they will make.

UNIVERSITY OF IOWA, DENTAL DEPARTMENT.

The Dental Department of this University is only seven years old ; yet its present session has been such a success that its matriculates number 79, an increase of fifty per cent. over its previous session. It presents 21 graduates, namely :

Emma Auger, Iowa.	I. B. Kenney, Iowa.
Geo. B. Colt, Iowa.	R. B. Murray, Wis.
E. Cotton, Iowa.	F. C. Noyes, Ill.
W. G. Clark, Iowa.	A. Ogg, Iowa.
E. E. Chase, Mo.	Edward Peek, Iowa.
G. E. Diehl, Iowa.	A. D. Reed, Iowa.
K. M. Fullerton, Iowa.	L. L. Richards, M. D., Iowa.
A. B. Glasier, Iowa.	A. T. Stillman, Iowa.
Wm. Humphrey, Iowa.	Frank Slater, Iowa.
G. Dayton Webb, Iowa.	L. A. Young, M. D., Mo.
	A. W. Ziegler, Wis.

Boys, now let the world hear from you ; and let the report be a good one.

THE KANSAS CITY DENTAL COLLEGE.

Graduates in dentistry : Rice R. Buchanan, Mo. ; Ben. H. Dickson, Ks. ; Horace J. Hughs, Ks. ; Charles V. Larmer, Mo. ; Ross T. Thomas, Mo. ; Fritz Baum, Prussia ; Jefferson D. Hannah, Mo. ; Newton W. Hiatt, Ind. ; Arthur E. McKellar, Ks. ; Frank L. Warren, Kan. ; Samuel C. Wheat, Mo.

Number of matriculates, 30.

Award of prizes : The Faculty prize, twenty-five dollars in cash, for the best general examination, awarded to Samuel C. Wheat. Prof. Patterson's prize, a case of instruments for oral surgery, awarded to Jefferson D. Hannah, for the best examination in dental pathology and oral surgery. Prof. Hungerford's prize, " Harris Principles and Practice of Dental Surgery," awarded to Arthur E. McKellar, for the best examination in operative dentistry. Dr. Hewitt's prize, a set of pluggers, awarded to R. R. Buchanan, for the best attainments in operative dentistry. Prof. Stark's prize, " Richardson's Mechanical Dentistry," awarded to Horace J. Hughs for the best specimens of mechanical dentistry.

How these Western cities do grow, both physically and intellectually ? It is but a few years since we were there, and then they had only had great bluffs of clay to show !

The Dominion Dental Journal, edited by W. George Beers, L.D.S., is a new quarterly, published at Montreal, P. Q., at \$1.00. Its first number gives promise of excellency.

THE UNIVERSITY OF MARYLAND, DEPARTMENT OF DENTISTRY.

The following long list of graduates, 92, is the result of the session just closed :

From Maryland, A. P. Badger, E. R. Dodson, M.D., D. Goebricher, J. G. Henisler; Virginia, C. G. Aven, J. P. Blair, H. W. Campbell, T. S. D. Covington, P. L. Ellis; S. Carolina, E. J. Bailey, V. D. Barbot, W. H. Holland, J. E. Molony, F. M. Oldham, B. Simons, H. K. Smith, W. J. Warnock; Pennsylvania, F. Beck, H. A. Free, E. P. Hayes, J. W. McKinnon, A. C. Shoemaker; West Va., E. D. Davis, W. L. Miller; Missouri, Henry Davis, M.D.; New Jersey, W. L. Fish, J. B. Sharp; New York, J. H. Haas; Mass., R. B. Hills; N. Carolina, G. B. Patterson; Cal., F. Z. Pirkey; N. H., M. V. Wright, M.D.; Germany, A. A. T. W. Curry, C. Opielinsky, F. F. W. Schloendorf; Asia Minor, S. L. Nigolosian; Bermuda, B. S. Roberts; Holland, C. Van der Hoevea, M.D.

There were 120 matriculates.

The University prize of a gold medal was won by V. D. Barbot, of South Carolina.

The next regular session will commence the 1st of October, 1889.

The summer session will commence on the 1st of April, 1889, and continue till the opening of the regular session.

The infirmary is open during the entire year for dental operations.

This university is one of the staunchest institutions of learning in the United States,—its Dental Department included. There is no sham work done here.

F. J. S. GORGAS, Dean.

COR. LOMBARD AND GREEN STS.,

BALTIMORE, MD, March 5th, 1889.

DR. T. B. WELCH, Editor *Items of Interest*:

DEAR SIR: On behalf of the Class of '89, U. of Md., allow me to thank you for the copies of ITEMS sent us during term about closing. They were appreciated by us all. Wishing the ITEMS prosperity and an increased circulation, I remain, yours truly,

WM. L. FISH, Pres. Class "89."

ED. ITEMS: The next meeting of the Nebraska State Dental Society will be held in Wahoo, commencing on the third Tuesday in May, and continuing four days. From the present outlook this promises to be the best meeting in the history of the Society. Several men of prominence in the profession from abroad will be with us, and a large attendance is expected. We should be pleased to have the ITEMS represented. Can't you come out and see us?

We'll try to be represented.—ED. ITEMS. J. J. WILLEY, Cor. Sec.

ROYAL COLLEGE OF DENTAL SURGEONS.

TORONTO, March 15, '89.

GRADUATED MARCH 8.

A. Hugh Hipple; J. W. Oakley; R. G. McLaughlin; Charles Ferguson; Charles S. McLean; J. J. Kerr; G. P. Matthewman; A. F. Webster, D.D.S.; J. H. Swann; Edward Eidt; J. T. Ireland; H. P. Martin; N. W. Cleary; Andrew Rose; E. Cunningham; A. J. Risk; George McDonald; all in the Province of Ontario, Dominion of Canada.

EDITOR OF THE ITEMS OF INTEREST:—

Dear Sir.—At the regular meeting of the Chicago Dental Society, held March 5, 1889, it was

Resolved, That it is the sentiment of this Society, that it would be of interest to the members of the dental profession to become members of the Dental Protective Association of the United States."

LOUIS OTTOFY, Secretary.

Dr. O. S. Covert of Denver has deceased. He was well known in the west as of sterling character, and as a skilful operator. He leaves a wife and two children. For their sakes, we hope his life was well insured. Ah, brethren, most of us who are now in health and prosperity, do not sufficiently prepare for reverses, especially for the possibility of leaving loved ones comparatively destitute. If we are taken away, a few thousand dollars comes in so nicely to support and educate children and give a good home to wife.

Dr. Amos A. Pevey of the firm of Pevey & Andrews, dentists, at 158 Main Street, Woonsocket, R. I., died recently at the age of 61. He was a dentist in Woonsocket, for 30 years, and a prominent man there and in Worcester where, for the last 9 years, he resided.

The tenth annual meeting of the Nebraska State Dental Society will meet at Wahoo on the third Tuesday of May and will hold three days. We expect this to be one of the best meetings ever held in the State. Members of the profession are cordially invited to meet with us.

Beatrice, Neb.

J. W. FUNCK, Sec.

Three principal forms of asceticism have existed in this world. Religious asceticism, being the refusal of pleasure and knowledge for the sake (as supposed) of religion, seen chiefly in the middle ages; military asceticism, being the refusal of pleasure and knowledge for the sake of power, seen chiefly in the early days of Sparta and Rome; and monetary asceticism, consisting in the refusal of pleasure and knowledge for the sake of money, as seen in the present day.

Miscellaneous.

What Prohibition Does.—A gentleman who has spent several months in Kansas says: “ Kansas boys ten years old and under never saw a saloon since they can remember. They never saw a man under the influence of liquor. On arriving at man’s estate, they will have no more desire for drink than they will have for opium or hasheesh.” This is very true, for we believe that, in very many cases, the habit of drinking liquor has found its origin in the imitative propensities of humanity; and where the example is not set, the habit will not be acquired.—*Annals of Hygiene.*

For Diarrhea and Dysenteria, a strong decoction of rhubarb, saturated with bicarbonate of soda (common cooking soda), is excellent. Pound up the rhubarb to a coarse powder, and to a pound put a quart of water and a half pound of soda, allowing the decoction to remain in a warm place for twenty-four hours. Drain off thoroughly and add another quart of water and half a pound of soda; in forty-eight hours drain off this liquor and add another quart of water, but no soda. In two days drain this off thoroughly and evaporate by heat to a half pint. Another quart added and the two quarts simmered down to a pint or pint and a half is well. Put the three liquors together and, while hot, add sufficient granulated sugar to make it palatable. When cold add sufficient of the tincture of equal parts of anise and pepperment to make it quite warm to the taste, but not sufficient to make it specially unpleasant.

For adults, a tablespoonful every fifteen minutes for 1 or $1\frac{1}{2}$ hours. For chronic diarrhoea or dysentery, indigestion, sour stomach, “ heart burn,” etc., take a tablespoonful on retiring, and perhaps two or three times during the day. For children less according to the age.

Capsicum as a Counter-Irritant.—Buy a “ Benson Capsicum Plaster,” shellac the back of it, cut off, in pieces of size suitable to the case in hand, and if only gentle stimulation is required, apply as it is. Should you wish more decided action, add a few grains of capsicum, which will adhere to the sticky surface. Should you desire to use other medicines, press a small wad of prepared cotton or paper fibre, lint to the sticky side of plaster, trim to suit, and moisten with any tincture or combination you please. This is also an effective way of applying cocaine. For sore or ulcerating teeth, apply moistened pads to the outside and the inside gum, hold with thumb and forefinger, or with properly bent piano wire.—*Dr. Rohland, in Archives.*

What Shall A Man Eat to have a good mental and physical organization? I cannot give any better answer than that which is recorded in the Bible; where it speaks of that land which the people of Israel were going to occupy as filled with corn and wine and oil, and flowing with milk and honey. If these are the things which were good for men to enjoy in those days, why not take the old Bible and settle the matter?—*Dr. Thayer.*

To make Chloride of Zinc.—The following from Dr. Cormany's address is given. If you succeed, let us know. Twenty-five cents will buy one ounce of chloride of zinc crystals. Five cents will buy one ounce of oxide of zinc. Make a saturated solution of zinc chloride in water, and this with your oxide will make you five dollars, worth of oxychloride of zinc, as bought from the manufacturers.

Laboratory Soap.—Save all small pieces of soap that accumulate about the office from the operating room and laboratory, cut into small pieces with a knife, place in a tin vessel, add a little water, pumice stone (powdered) and a very small amount of concentrated lye, boil over a slow fire till all is nearly dissolved or melted, pour out in a vessel for molding, and when cold cut the desired size, and you will have the most desirable laboratory soap anyone could wish; it will remove all stains, and with a five cent package of soapine you will have soap for the laboratory sufficient to last a year.—*Dr. J. W. Cormany.*

Plain Food.—Some despise the crude diet of the old New Englanders, and how they lived on the plain foods of past time. We know that they were mentally a grand race, we know what has sprung from them, but we do not know much about their teeth. I would like very much to learn something about them.

I consider this an important and practical question, one that brings us down out of the clouds to the comparative results and desirability of living on the plain, coarse foods used at that time, and the diet which we should have to day. I doubt very much whether the race of to-day is mentally any stronger than they were in those old New England days. They were grand men.—*Dr. C. S. Stockton.*

Be Careful You do Not Command Yourself.—It is a sign that your reputation is small and sinking if your own tongue must praise you. Let your words be few, especially when your superiors or strangers are present, lest you betray your own weakness and rob yourself of the opportunity which you might otherwise have had to gain knowledge, wisdom, and experience, by hearing those whom you silenced by your impertinent talking.—*Sir Matthew Hale.*

“An university exercise” says a contemporary. This is wrong, we might as well speak of an universal fraternity, an usual diet, an unit, an union. An should only be used before words beginning with the sound of a pure vowel, as “an arm of flesh;” or before words commencing with silent h preceding a pure vowel, as “an honest man;” or before words in which the initial h is sounded, but where the accent is not on the first syllable, as “an hotel,” “an historical lecture.” U is not a pure vowel, and therefore improperly preceded by an.

Be specific in your accounts. In other words, be business like. Send your bills to business men and others, as you would have them send your bill to you. Why, you would be offended if they sent in your bills as indefinite and no better itemized than you send them yours.